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DEPARTMENT
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REGULATIONS

OF THE

DEPARTMENT OF EDUCATION

FOR THE YEAR ENDING

JUNE 30th, 1938

RELATING TO THE

PROGRAMME OF STUDIES

AND ANNUAL EXAMINATIONS

FOR

HIGH SCHOOLS

(GRADES X, XI, AND XII)

EDMONTON:
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REGULATIONS

PRELIMINARY NOTICES.

1. **The attention of Principals and school authorities generally is directed to the important fact that Grade IX is no longer a part of the High School Programme.**

2. Students who have already done some Grade X work during the year 1936–37, or before, may continue their Courses under the new Programme for Grade X.

3. Students who, on September 1st, 1937, proceed to Grade X work for the first time are required to hold complete Grade IX standing, and to have been promoted to Grade X by the High School Entrance Examination Board. The Grade IX Diploma (Grade "A", "B", or "C") will be evidence of promotion.

4. Principals are asked to note carefully the conditions of promotion to Grade X for each of the three "Grades", or categories, as stated on pages 16 and 17 of the *Programme of Studies for the Intermediate School.*

5. The unit system of promotion will still obtain in the new *Programme of Studies for the High School,* of which the part relating to Grade X is introduced this year.

6. Twenty-nine units of credit and complete Grade XII standing are now required for entrance to Alberta Normal Schools.

GENERAL REGULATIONS.

1. *The Hand-book for Secondary Schools, Alberta,* is now out of print. Nevertheless, reference is still made to it in the outlines for some of the Courses belonging to the old Programme. If any differences are found between the outlines appearing in the Hand-book and in the Regulations, the statement contained in the Regulations is to be taken as final.

2. The Department of Education will forward to the secretary of each school district early in the year a card on which the teacher shall indicate the High School subjects which are being prepared at the school and the number of students preparing each subject. This card should be completed and returned to the Department before April 1st.

3. The Department of Education will also forward to the schools from which information cards have been received, official forms on which the teacher shall record the names and addresses of students who are recommended for credit and the marks obtained on each subject as finally determined. These reports shall be forwarded to the Registrar, Department of Education, Edmonton, before July 6th.

4. Principals having students who hold High School credits obtained outside the Province should secure from the Department of Education, early in the year, rulings respecting the units that will

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still be required of these students in order that they may complete the Course for which they are enrolled.

5. The annual Departmental Examinations for the subjects of Grades XI and XII will be held between June 10th and June 30th, upon such days and at such places as may be determined by the Minister of Education.

6. Every candidate who wishes to write upon any Departmental Examination shall, *not later than April 15th*, make application to the Department. Special forms are furnished for this purpose, and will be forwarded to Principals of schools on request.

7. The Principal of every school having candidates for the Departmental Examinations of Grades XI and XII shall, between June 1st and 15th, forward to the Department of Education a confidential report on each candidate, under the following heads: length of time preparing for examination; regularity of attendance; ability; attitude towards work; physical fitness; relative standing in class. Where possible, percentages based on the candidate's work during the year should be given. Special forms are furnished for this purpose.

8. **In the early part of the fall term, the Department of Education will announce further Regulations respecting credits, promotions, and examinations in Grade X and Grade XI subjects.**

9. The Department will recognize for credit the certificates of the Principal Boards conducting examinations in Music in the Province. Standing in both Practical Work and Theory is required.

The following Table indicates the requirements for credit in Music 1, 2, or 3, in terms of the examinations conducted by the Examining Boards:

Examining Boards	HIGH SCHOOL					
	Grade X		Grade XI		Grade XII	
	Practical	Theory	Practical	Theory	Practical	Theory
University of Toronto Toronto Conservatory...	Grade VII.	Grade II.	Grade VIII.	Grade II, and Grade III Harmony.	Grade IX.	Grades II and III, complete.
Western Board of Music.....	Grade VI.	*Grade IV.	Grade VII.	†Grade V.	Grade VIII.	‡Grade VI.
McGill University McGill Conservatorium....	Intermediate Grade.	Junior Grade.	Senior Grade.	Junior Grade.	Highest Grade.	Intermediate Grade.
Associated Board of Royal Schools.....	Grade V.	Grammar of Music Grade III.	Grade VI.	Grammar of Music. Grade IV.	Grade VII.	Harmony, Grade IV.

*Without the History.
†With Grade IV History.
‡With Grade V History.

10. Hereafter the Department of Education, instead of setting its own examination papers in Music Theory (Music 1, 2, and 3), will conduct annually the examinations of the Western Board of Music for Grades below the Associateship and Licenciateship. The Theory examinations of the Western Board are held in February and in May of each year, and the Practical examinations are held in June. Candidates who desire to take the Western Board Examinations are requested to notify the Department not later than January 1st, or May 1st, as the case may be.

N.B.—These examinations are for students who take private instruction in instrumental or vocal Music, and not for students who take the High School Course in Music.

11. The following fees are prescribed in connection with Departmental Examinations:

For each unit—$1.00 up to a maximum of $5.00 for the Grade XI examinations; and a maximum of $6.00 for the Grade XII examinations.

The examination fees shall be paid to the Presiding Examiner on the first day of the examination.

The fee for appeals shall be $1.00 per paper. If an appeal is sustained, the fee will be refunded.

NORMAL SCHOOL ENTRANCE.

All students qualifying for Entrance to Normal School in September, 1938, must hold credits in the following subjects of the Alberta High School Course.

1. **English Literature 1, 2, and 3.**
2. **English Composition 1, 2, and 3.**
3. **History 1, 2, and 3.**
4. **Algebra 1 and 2.**
5. **Geometry 1 and 2.**
6. **Arithmetic 1.**
7. **Art 1.**
8. **Geography 1.**
9. **General Science 1.**
10. **Physics 1 or Agriculture 1.**
11. **Chemistry 1 or Agriculture 2.**
12. **Two units to be selected from either (a) or (b), below:**
    (a) **Either Latin 1 and 2 or French 1 and 2 or German 1 and 2 or Greek 1 and 2.**

(b) Art 2, Music 1, Music 2, Manual Training 1, Manual Training 2, Household Economics 1, Household Economics 2, the Science subjects not already chosen.

13. English Composition 4, English Literature 4.

14. Six units to be selected from the following: History 4, History of English Literature 1, Algebra 3, Geometry 3, Trigonometry 1, Physics 2, Biology 1, Chemistry 2, Latin 3, French 3, German 3, Greek 3, Music 3.

UNIVERSITY MATRICULATION.

Matriculation requirements vary in the different Faculties of the University of Alberta, and with reference to the particular Course to be pursued.

For full information respecting matriculation requirements, students should consult the Matriculation Bulletin of the University.

Students who propose to enter the Faculty of Arts of the University of Alberta are now required to secure matriculation in but one foreign language.

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REVISION OF THE HIGH SCHOOL PROGRAMME

The High School Programme is under revision. **During the year 1937–38, the revised Programme for Grade X will be used in all schools of the Province where this Grade is taught; but the unrevised Programme for Grades XI and XII will continue in use as before.**

The revised Programme for Grade XI will be introduced in September, 1938.

COMPLETION OF GRADE X UNITS.

Students who are required to complete any units of the former Grade X programme may obtain the required standing by completing the corresponding units of the new Programme, as shown in the following Schedule:

Units of Former Grade X Programme.	Corresponding Units of New Programme.
Literature 2	English 1 (Literature part).
Composition 2	English 1 (Composition part).
History 2	Social Studies 1.
Algebra 2	Algebra 1.
Geometry 2	Geometry 1.
Physics 1	Physics 1.
Art 1	Art 1.
Agriculture 1	Biology 1.
Manual Arts 1	General Shop.
Household Economics 1	Home Economics.
French 1	French 1.
Latin 1	Latin 1.
German 1	German 1.

SUBJECTS OF GRADES XI AND XII.

The subjects of the Second and Third Years of the unrevised High School Programme (Grades XI and XII) are as set forth in the following Tables:

SECOND YEAR (UNREVISED)—GRADE XI.

Normal Entrance	Agricultural	Commercial	Technical
English { Literature 3 / Comp. 3 History 3 Agriculture 2 or Chemistry 1 Arithmetic 1 Geography 1 { If not taken in the first year. †Algebra 2 { If not taken in the first year. †Geometry 2 { If not taken in the first year. [6 units].	English (2 units) History 3 Chemistry 1 Agriculture 2 Arithmetic 1 [6 units].	Literature 3 Business English and Office Practice 3 Book-keeping 2 Commercial Law 1 Geography 1 Mathematics 2 Secretarial Training 1 [7 units].	English { Literature 3 / Comp. 3 History 3 Geography 1 **For Boys** Science 3 General Mathematics 3 **For Girls** Chemistry for Technical Schools 1 Physiology and Hygiene 1 [6 units].
Physical Education	**Physical Education**	**Physical Education**	**Physical Education**
And **two** of the following: ‡Art 2 §Chemistry 1 or Agriculture 2 †Latin 2 †Greek 2 †German 2 †French 2 †Music 2 †Manual Arts 2 †Household Economics 2	And **two** of the following: Art 2 Geography 1 Algebra 2 Geometry 2 Latin 2 French 2 German 2 Greek 2 Music 2		And **one** of the following: Electricity 3 Metal 3 Motor Mechanics 3 Building Construction 1 Foods and Clothing 1 Dietetics 1 Industrial Art 1

†The second units in these subjects may be chosen only in case they were not selected in the first year.

‡Art 1 is a pre-requisite to Art 2.

‡Students preparing for Nursing should elect Chemistry as the second year Science.

N.B.—There are three units of Composition, one for each year of the High School. Students should not be permitted to attempt two units of Composition in the same year.

THIRD YEAR (UNREVISED)—GRADE XII.

Normal Entrance	Commercial
English { Literature 4 / Composition 4 [2 units].	Literature 4 Advertising and Salesmanship 1 Mathematics 3 Book-keeping 3 History 3 Practical Office Training 1
Physical Education	**Physical Education**
And **six** units to be chosen from the from the following: History 4, History of English Literature 1, Algebra 3, Geometry 3, Trigonometry 1, Physics 2, Biology 1, †Chemistry 2, German 3, French 3, Latin 3, Greek 3, Music 3.	And **one** of the following: Commercial French 3 Physiology and Hygiene 1 Art 1 Any unit of the third- and fourth-year Academic programme not taken previously.

†Only schools having proper laboratory facilities and equipment should offer Courses in Chemistry 2.

THE GENERAL COURSE—UNREVISED PROGRAMME.

Students who entered Grade X in September, 1936, will be granted a **High School Diploma** when they have completed fifteen units of the unrevised High School Course, in addition to six units of the former Grade IX Course. Physical Education and four units of English, two of which must be Literature 3 and Composition 3, are the only required subjects. At least six of the fifteen units must be chosen from the subjects of the Second and Third Years. The remaining units may be chosen as desired.

Students who have obtained the High School Diploma, and have also completed eight additional units in subjects of the Third Year, will be granted a **High School Graduation Diploma.**

THE NEW GRADE X PROGRAMME.

The new Grade X Programme is the first year of a new *Programme of Studies for the High School,* which is based on a new time schedule. The school day comprises **eight** class periods of which **one** must be a **study period.** During each of the three years of the programme, thirty-five class periods per week will be available for instruction, and the programme for each student is to be filled out accordingly.

The following is a complete list of the subjects in which instruction may be offered to Grade X students. **The number in brackets after each subject indicates the amount of time in periods per week that is to be devoted to the subject.**

Compulsory Subjects

(To be taken by every student in every school):

English 1. [5].
Social Studies 1. [5].
Health and Physical Education. [3].

Academic Subjects

(Mainly for Normal Entrance and Matriculation):

Algebra 1. [5].
Geometry 1. [5].
Chemistry 1. [5].
Latin 1. [5].
French 1. [5].
German 1. [5].
Physics 1. [5].

Optional Subjects

(For all students):

Contemporary English 1. [3].
*Dramatics 1. [4].
*Music 1. [4].
Art 1. [4].
*Mechanical Drawing. [3].
General Mathematics 1. [5].
General Science 1. [5].
Biology 1. [3].
Physical Geology. [3].
*Book-keeping 1a. [3].
*Stenography 1a. [3].
*Typewriting 1a. [3].
*General Shop. [4].
*Home Economics 1. [4].
*Needlework. [3].

*Special qualifications required of the teacher.

N.B.—General Mathematics 1 and General Science 1 will not be counted for credit towards Normal Entrance or Matriculation.

COMMERCIAL SUBJECTS

(For Commercial High Schools, or "composite" high schools):

Book-keeping 1. [5].
Stenography 1. [5].
Typewriting 1. [5].
Commercial Mathematics 1. [5].
Spelling 1. [2].
Penmanship 1. [2].

TECHNICAL SUBJECTS

(For Technical High Schools, or "composite" high schools):

Woodwork 1. [9].
Metal Work 1. [9].
Electricity 1. [9].
Printing 1. [9].
Arts and Crafts 1. [9].
Arithmetic and Mensuration 1. [4].
Physics of the Home. [5].
Fabrics and Dress 1. [9].
Home-making 1. [9].

N.B.—For a Shop Course, the **nine** periods a week will be distributed in the following manner:

Drawing and Design—2;
Theory—2;
Shop Practice—5.

THE HIGH SCHOOL DIPLOMA.

The successful completion of a year's Course in any of the above listed subjects of the new Grade X Programme will entitle the student to as many credits as the number appearing in parentheses after the name of that subject in the list. In one year the student should therefore earn thirty-five credits; and in three years, approximately 105 credits. **Students who complete the three-year programme, earning 100 or more credits, will be granted the High School Diploma,** by the Department of Education. **This Diploma will be the same for all Courses**—General, Normal Entrance, Matriculation, Commercial, or Technical. In fact, these Courses are merely convenient groupings of subjects, to fit special types of school, staff, equipment, and organization. In High Schools of a more or less "composite" type, it will be possible for the student to take subjects that belong to two or three different Courses.

COURSES.

I.—THE GENERAL COURSE.

Grade X—Compulsory Subjects:

English 1—[5]; Social Studies 1—[5]; Health and Physical Education—[3].

Grade XI—Compulsory Subjects:

English 2—[5]; Social Studies 2—[5].

Grade XII—Compulsory Subjects:

English 3—[5]; Social Studies 3—[5].

Other subjects are to be chosen from the Optional List, or, **where facilities permit,** from the Academic, Commercial, or Technical

Lists, to make up thirty-five periods per week during each of the three years of the Course.

Provided, however, that for the first year of the Course, a sufficient number of subjects must be chosen from the list of Optional subjects to occupy at least seven (7) periods a week. (For the second year, at least ten periods a week will be required for similar options.)

Provided further, that **students must choose their Courses in accordance with the conditions of their promotion from Grade IX.** (See the *Programme of Studies for the Intermediate School,* pages 16 and 17.)

II.—The Course for Normal Entrance.

Grade X—Compulsory Subjects:

English 1—[5]; Social Studies 1—[5]; Algebra 1—[5], or Geometry 1—[5]; Physics 1—[5], **or** Chemistry 1 in Grade XI; Health and Physical Education—[3]; Biology 1—[3], **or** Biology 2 in Grade XII; Art 1—[4], **or** Music 1—[4].

Grade XI—Compulsory Subjects:

English 2—[5]; Social Studies 2—[5]; Geometry 1—[5], **or** Algebra 1—[5]; Chemistry 1—[5], **or** Physics 1 in Grade X; Music 1—[4], **or** Art 1—[4].

Grade XII—Compulsory Subjects:

English 3—[5]; Social Studies 3—[5]; Biology 2—[5], **or** Biology 1 in Grade X.

Additional subjects to be chosen from the list of Optional subjects, above, or from any Course or Courses of the High School Programme in such a way as to make up the thirty-five (35) periods a week for each of the three years of the Course; **with the proviso, however, that for the first year of the Course, a sufficient number of subjects must be chosen from the Optional list, excluding Art 1, Biology 1, General Mathematics 1, General Science 1, and Music 1, to occupy at least seven (7) periods a week.** (For the second year at least ten periods a week will be required for similar Options.)

III.—The Course for University Matriculation.

This Course is set forth in the following Table:

COURSE FOR UNIVERSITY MATRICULATION.

(Common) Grade X	B.Sc. IN ARTS, OR GENERAL B.A.		B.A. (SPECIAL)		PROFESSIONAL FACULTIES (MEDICINE)	
	Grade XI	Grade XII	Grade XI	Grade XII	Grade XI	Grade XII
English 1—[5]	English 2—[5]	English 3—[5]	English 2—[5]	English 3—[5]	English 2—[5], or Social Studies 2—[5]	Social Studies 2—[5], or English 2—[5]
Social Studies 1—[5]	Social Studies 2—[5]	Social Studies 3—[5], or a third Science	Social Studies 2—[5]	Social Studies 3—[5]		
Algebra 1—[5], or Geometry 1—[5]	Geometry 1—[5], or Algebra 1—[5]	Algebra 2—[5] Geometry 2 and Trigonometry—[5]	Geometry 1—[5], or Algebra 1—[5]	Three of the following: (1) Algebra 2—[5], (2) Geometry 2 and Trigonometry—[5], (3) Physics 2—[5], or Chemistry 2—[5], (4) Biology 2—[5]	Algebra 1—[5], or Geometry 1—[5]	Algebra 2—[5] Geometry 2 and Trigonometry—[5]
Physics 1—[5], or Chemistry 1—[5]	Chemistry 1—[5], or Physics 1—[5]	Two of the following: (1) Physics 2—[5], (2) Chemistry 2—[5], (3) Biology 2—[5]			Physics 1—[5], or Chemistry 1—[5]	Physics 2—[5] Chemistry 2—[5]
Foreign Language 1—[5]	Foreign Language 2—[5]	Foreign Language 3—[5]	Foreign Language 2—[5]	Foreign Language 3—[5]	Foreign Language 2—[5]	Foreign Language 3—[5]
Health and Physical Education—[3]			Second Foreign Language 1—[5]	Second Foreign Language 2—[5]	Second Foreign Language 1—[5]	Second Foreign Language 2—[5]
Compulsory Subjects: 28	25	35	25	35	25	35
Optional Subjects: 7	10		10		10	

N.B.—**Optional subjects** for the first year are to be chosen from the list of Optional subjects, excluding General Mathematics 1 and General Science 1, sufficient in number to occupy seven (7) periods a week.

IV.—The Commercial High School Course.

This is a three-year Course of which the following are the subjects for the first year:

Grade X (First Year)—Compulsory Subjects:

English 1—[5]; Social Studies 1—[5]; Health and Physical Education—[3]; Stenography 1, **or** Book-keeping 1—[5]; Typewriting 1—[5]; Commercial Mathematics—[5]; Spelling 1—[2]; Penmanship—[2].

Grade X (First Year)—Optional Subjects:

Subjects sufficient in number to occupy **eight** (8) periods a week are to be chosen from the following:

French 1—[5]; the subjects given in the list of Optional subjects excluding Stenography 1a and Typewriting 1a; together with other subjects from the Academic or Technical lists.

Provided, however, that for the first year of the Course, a sufficient number of subjects must be chosen from the list of Optional subjects to occupy at least seven (7) periods a week. (For the second year, at least ten periods a week will be required for similar Options.)

Provided, further, that students must choose their Courses in accordance with the conditions of their promotion from Grade IX. (See the *Programme of Studies for the Intermediate School,* pages 16 and 17.)

N.B.—Further particulars respecting the Commercial Course will be found in the mimeographed outlines to be issued by the Department of Education.

V.—The Technical High School Course.

This is a three-year Course of which the following are the subjects for the first year:

Grade X (First Year)—Boys:

English 1—[5]; Social Studies 1—[5]; Health and Physical Education—[3]; General Mathematics 1—[5]; General Science 1—[5].

Shop Subjects: Two of the following:

Woodwork 1—[9]; Metal Work 1—[9]; Electricity 1—[9]; Automotives 1—[9]; Arts and Crafts 1—[9]; Printing 1—[9].

Grade X (First Year)—Girls:

English 1—[5]; Social Studies 1—[5]; Health and Physical Education—[3]; Arithmetic and Mensuration—[4]; Physics of the Home—[5].

Shop Subjects: Two of the following:

Fabrics and Dress 1—[9]; Home-making 1—[9]; Arts and Crafts—[9].

Note.—For a Shop Course the nine periods a week will be distributed as follows:

Drawing and Design—2; Theory—2; Shop Practice—5.

The only compulsory subjects of this Course are English, Social Studies, and Health and Physical Education.

In the place of General Mathematics 1, General Science 1, Arithmetic and Mensuration, Physics of the Home, and the Shop Courses, the student may choose other subjects from the Optional, Academic, or Commercial lists.

Provided, however, that if the student does not elect two Shop Courses, he (or she) must choose a sufficient number of subjects from the Optional list to occupy at least seven (7) periods a week.

Provided, further, that students must choose their Courses in accordance with the conditions of their promotion from Grade IX. (See the *Programme of Studies for the Intermediate School,* pages 16 and 17.)

N.B.—Further particulars respecting the Technical Course will be found in the mimeographed outlines to be issued by the Department of Education.

OUTLINE OF REQUIREMENTS

1937–38

N.B.—Details of all Courses except those included in these pages are obtainable in the *Hand-book for Secondary Schools, Alberta.*

FIRST YEAR—GRADE X.

English 1.

This Course comprises *Literature* and *Composition.*

LITERATURE:

The following is the prescribed reading:

Poetry:—Adrian Macdonald: *A Pedlar's Pack.*

Drama (one Play to be chosen from the following):—Shakespeare: *As You Like It*; Shakespeare: *Midsummer Night's Dream*; Galsworthy: *Silver Box*; Barrie: *The Admirable Crichton.*

Fiction (any six from this selection):—Buchan: *Greenmantle*; Tennyson: *Idylls of the King*; Scott: *Ivanhoe*; Scott: *Lady of the Lake*; *Marco Polo's Travels*; Hemon: *Maria Chapdelaine*; Parker: *Seats of the Mighty*; Eliot: *Silas Marner*; Dickens: *Tale of Two Cities*; Scott: *Talisman*; Wister: *The Virginian*; Hardy: *Under the Greenwood Tree.*

N.B.—For two of the six to be chosen from the selection of Fiction, the teacher and class may, after consultation, substitute two others, not on the list.

The study of rhythm in verse continued.

(a) The foot of three syllables; dactylic and anapaestic.
(b) Rhyme: beginning rhyme, end rhyme: (1) single, (2) double.
(c) Special metres: blank verse, dactylic hexameter.
(d) Scansion of easy blank verse and dactylic hexameter verse.

Passages for memorization (about 150 lines) are to be chosen by teacher and class in consultation.

COMPOSITION:

For details of this Course, see *Hand-book* (1930 edition).

Text:—Gordon: *A New Composition for Secondary Schools*, Part II.

N.B.—The chapter on Grammar in "Gordon" will need to be supplemented with additional material based on the outline of requirements as stated in the *Hand-book.* The rhetoric of the sentence as treated in Chapters III, IV, and V, Part II, of the authorized text, is included in the Course.

Social Studies 1.

See the outline below.

Health and Physical Education.

See the outline below.

Algebra 1.

The prescribed text-book constitutes the Course.

Text-book:—Betz, Robinson and Shortliffe: *Algebra for To-day* (Ginn & Co.).

Crawford's *High School Algebra* may be used only by students who are repeating Algebra 2.

Geometry 1.

Books III and IV of the authorized text, omitting Proposition 15, Book IV.

Text-book:—McDougall and Sheppard: *High School Geometry* (Copp Clark Company).

N.B.—A new text-book is in preparation for use during the year 1938–39.

Physics 1.

Text-book:—Merchant & Chant: *Ontario High School Physics* (Revised Edition), (Copp Clark Company).

N.B.—The following paragraphs give the number of the chapters in the Revised Edition of the text which should be covered, also paragraphs which may be omitted:

(a) Molecular Theory.

Chapters XV and XVI (omitting Paragraphs 149, 150, 153, and 155).

(b) Heat.

Chapters XXII, XXIII, and XXIV.
Chapter XXV (omitting Paragraphs 243, 244, and 245).
Chapter XXVI.
Chapter XXVII (omitting Paragraphs 273–275).
Chapters XXVIII and XXX.

(c) and (d) Wave Motion and Sound.

Chapter XVII (omitting Paragraphs 159–161 and 175–177).
Chapter XVIII (omitting Paragraphs 186–191).
Chapter XIX (omitting Paragraphs 196–198, 204–206, and omitting mathematical calculations on vibrations of strings. Give only factors upon which frequency of an air-column depends, and relation of wave-lengths to lengths of open and closed air-columns).
Chapter XXI.

(e) LIGHT.

Chapter XXXI (omitting Paragraph 320).

Chapters XXXII and XXXIII.

Chapter XXXIV (omitting Paragraph 341).

Chapter XXXV (omitting Paragraphs 351 and 353). Teach index of refraction and experimental determination. Leave out geometric proof.

Chapter XXXVI (omitting Paragraphs 364 and 367).

Chapter XXXVII (omitting Paragraphs 377 and 379–383).

Chapter XXXVIII (omitting Paragraphs 385 and 389–392).

N.B.—The Course in Light should be made as experimental as possible, but the use of drawings representing images with plane and curved mirrors and lenses will be found necessary for purposes of illustration.

(f) ELECTRICITY AND MAGNETISM.

Chapter XXXIX.

Chapter XLI (omitting Paragraphs 441 and 443). Teach Ohm's Law. Paragraphs 525, 526, 527, along with 448.

Chapter XLII (omitting Paragraphs 450–452, 454–456, and 458–460).

Chapter XLIII (omitting Paragraphs 461–462, 464, 468–473).

Chapter XLIV (omitting Paragraph 476).

Chapter XLV (omitting Paragraphs 499, 500, 502). Teach induction coil, but omit self-induction and condenser.

Chemistry 1.

See the outline for Chemistry 1 of the Grade XI Course.

Latin 1.

For details, see *Hand-book.*

Text-book:—Thompson, Tracy & Dugit: *Essential Latin,* pages 1–250 (Clarke, Irwin & Company).

French 1.

Text-book:—Roux: *Premier Cours de Français* (Macmillan Company). Lessons 1–25, including review exercises.

Teachers' Reference:—*A Teachers' Manual and Key to accompany Premier Cours de Français.*

Grammar:—A study of the principal parts, and the future, imperfect, past definite, present indicative, imperative, and past indefinite tenses of the following verbs for recognition purposes: *donner, finir, répondre, avoir, être, commencer, écrire, savoir, aller, faire, prendre, dire, voir, pouvoir, traduire, mettre.* It is suggested that suitable exercises of the text be reviewed in the above tenses.

Reading:—Saxelby: *A L'Enseigne du Coq* (Ginn & Company).

Only the first three selections will be required. Sight reading is not required.

German 1.

Text-book:—Chiles and Wiehr: *First Book in German* (Ginn & Company). Lessons 1–15, including review exercises. For additional reading, if required:—Hagboldt: *Fünf berühmte Märchen* (Book V), (Copp Clark Company), is recommended.

Occasional practice in German script should be given.

OPTIONAL SUBJECTS.

Contemporary English 1.

This Course has not yet been prepared, and will not be offered during 1937–38.

Dramatics 1.

See the outline below.

Music 1.

See the outline below.

Art 1.

See the outline below.

Mechanical Drawing.

Work in Mechanical Drawing will include the use of drafting equipment: T-square, set-squares, scale, and instruments. A study to be made of geometric and projection drawing. A series of at least 30 plates, neatly drawn, should constitute a year's work—these to include: lettering, geometrical construction, conventions and symbols used in drafting, projection drawing (including hidden parts and sections, drawing to scale, and inking).

Text-book:—*Mechanical Drawing Pamphlets,* Lessons 1–10 (inclusive): (Instruments and Materials: Lettering; Geometrical Definitions, Geometrical Problems I, II; Symbols—Dimensions—Inking a Drawing; Principles of the Working Drawing I, II, III, IV), by Tom. C. Plumridge, James McKinney, and Ervin Kenison, American School, Chicago, Illinois.

General Mathematics 1.

This is a "diluted" Course in Mathematics, for those who do not intend to proceed to higher academic work. The teacher is left free to select material that is suited to the needs of his class.

For the year 1937–38, **either**, or **both**, of the following books may be used in the place of a text-book:

Algebra for Use, Book III (Mathematics for Junior High Schools); (John C. Winston & Company).

Mathematics for Technical Schools, by Warren and Rutherford (Copp Clark Company).

If the latter book is used, the following suggestions are offered: For a maximum Course—

(a) Omit about 74 pages:—

Pages 63–81 (Chapter VI), "Application of Measures to Trades".

Pages 139–191 (Chapter X), "Mathematics of the Machine Shop".

(b) Include a section on *Variation* (1921 Edition), pages 288–296.

(c) Include a section for girls on the types of problems related to home-making, millinery and dress-making; e.g., menus, bias problems, etc.

(d) What Theoretical Geometry is required may be supplied by the teacher.

Teachers' Reference:—*Applied Mathematics for Girls* (Bruce Publishing Company, Milwaukee).

General Science 1.

See the outline below.

Biology 1.

As outlined in Parts I–V inclusive of the authorized text-book.

Text-book:—*Canadian Agriculture for High Schools* (Macmillan Company).

Physical Geology.

See the outline below.

Book-keeping 1a.

The outline for this subject is the same as that for Book-keeping 1 of the Commercial Course, but the time allotment is 3 instead of 5 periods a week.

Text-book:—*Canadian Modern Accounting,* Part I.

Stenography 1a.

The outline for this subject is the same as that for Stenography 1, of the Commercial Course, but the time allotment is 3 instead of 5 periods a week.

Text-book:—*Pitman Shorthand* (Canadian Centennial Edition).

Typewriting 1a.

The outline for this subject is the same as that for Typewriting 1, of the Commercial Course, but the time allotment is 3 instead of 5 periods a week.

Text-book: — Stuart: *Complete Typewriting Course,* Part I (Copp Clark Company).

See the outline below.

Home Economics 1.

See the outline below.

Needlework.

The outline for this subject may be had on application to the Department of Education.

SOCIAL STUDIES

GRADE X

INTRODUCTION.

Social Studies for Grade X surveys briefly the story of man from the earliest times down to 1500. It includes not only the political history of the important peoples, but their social, economic, and moral history as well. It includes, further, the facts and influences of geography essential to the understanding of history.

An understanding of the fundamental principles is a primary objective; it is the lessons of history, not merely the facts, that are to be learned. Historical and social principles of importance may be observed in the past, where they are free of current prejudices. Early history is a background for an understanding of the present. In fact, many institutions of to-day cannot be understood without a knowledge of early, and especially medieval, history. Possession of the facts about the origins and movements of peoples, together with their contributions to human knowledge, should help to dissipate current false ideas about races. The slowness with which our present civilization has been built up, and our great debt to past generations should be realized. Last, the study of early history is extremely interesting; the teacher may measure his success by the enthusiasm he arouses.

The methods to be employed should be such as to make the attainment of the aims easily possible. Lecture and explanation will be required, but the pupils should have every opportunity to discover for themselves and to express themselves. Individual pupils or groups of them may be set at interesting investigations. Current magazines and newspapers should be read during the year in terms of Social Studies. Bulletin boards, scrap-books, cartoon histories may be of assistance. Class discussions, properly regulated, should be employed extensively. The emphasis should be on practice in interpreting and understanding facts, and not merely on collecting and memorizing them. However, the facts, and enough of them, must be obtained before they can be interpreted.

The study of current events is part of the work to be covered. Wherever possible the history of the past should be related to the world of to-day. This need not cause a straining of facts. It is not possible to read all the problems of to-day in terms of Ancient Egypt. Other current events of interest should be discussed even if they have no bearing on early history. Perhaps it is better that there should be no set period for current events. The time allowed should be variable; some days may offer little of interest, while others may have much for interesting and valuable discussion. The topics may be suggested by the instructor, but it is better if

the pupils are trained to bring up the topics themselves. This is easily brought about by a few suggestions early in the year.

Since important facts must be retained, testing is essential. Testing should be designed, however, to stimulate interest and not to kill it. No useful purpose is gained in forcing students to memorize unimportant facts by giving them the kind of test that requires it.

If interest can be maintained and an eager spirit of inquiry built up, success has been achieved.

Three text-books are recommended for use. While no pupil need, nor should, own all three, **every pupil should have at least one.** In a class of 25, ten should have a copy of DeWitt, ten a copy of West, or West and Eastman, and five a copy of Tenen. Two lists of reference books are given. The school library should possess at least one copy of each on the primary list, and more if possible. As many as can be afforded from the secondary list should be obtained; they are all valuable.

Pupils and teachers should not confine themselves to the authorized list. Encyclopaedias and reference books are to be found in private homes as well as in civic libraries. Magazines and newspapers frequently provide excellent material. For example, the *Illustrated London News* publishes accounts of the excavation of ancient cities; the accompanying pictures are worthy of careful attention. *The National Geographic Magazine* gives accounts of primitive people living in our own time. In every community, citizens with special knowledge on parts of the work are to be found; clergymen, lawyers, physicians, and others may well be invited into the class-room. One warning: all outside sources of information should be checked for reliability—for not every reference book is to be depended on.

Grade X Social Studies is composed of eight themes, or topics. Five of these, together with Current Events, are required for the year 1937–38. Themes 1, 2, 3, and 8 are obligatory, and one may be chosen from the optional themes.

The references given in the outline are not necessarily exhaustive, nor is it necessary that all should be employed.

LIST OF BOOKS.

TEXT-BOOKS:—No pupil is expected to buy all three.

1. West: *Early Peoples*; or
   West and Eastman: *Modern Progress* (preferable).
2. DeWitt: *A Brief World History.*
3. Tenen: *The Ancient World.*

PRIMARY REFERENCES:—The school library should have at least one copy of each.

Breasted: *Ancient Times.*

Cary: *History of Rome.*

Collins: *History of Medieval Civilization.*
A. S. Peake: *Origins of Agriculture.*
Quennell: *Everyday Life in Prehistoric Times.*

General Reference List:—School libraries.
Wells: *Outline of History.*
Atlas of Ancient and Classical Geography.
A Smaller Classical Dictionary.
Weech: *World History.*
Pahlow: *Man's Achievement to the Age of Steam.*
Seary and Paterson: *Story of Civilization.*
Showerman: *Rome and the Romans.*
Elliot: *Teachers' Book of Social History.*
McKinley-Howland-Dann: *World History in the Making.*
Rouse: *Stories of the Old Greeks.*
Power: *Cities and Their Stories.*
Archer: *Stories of Exploration and Discovery.*
Douglas-Smith: *The World of the Ancients.*
Priestley: *Beginners' Ancient History.*

Historical Novels help to give reality to the facts of history; particularly recommended are those of W. S. Davis. The following titles are valuable for this course:

The Victor of Salamis.
A Friend of Caesar.
God Wills It.
The Beauty of the Purple.
The Friar of Wittenberg.
A Day in Athens.
A Day in Old Rome.
Life on a Medieval Barony.

THEME 1.—THE FAMOUS STATES OF HISTORY (Obligatory).

Minimum Requirements:

(a) Knowledge of the origin and rise of each state; with the why and how in each instance.

(b) Knowledge, in each state, of the form of government;—in simple forms, avoiding technical language and fine distinctions.

(c) The effect of geographic and economic conditions on each state or civilization.

(d) The idea that generally a form of government is developed to meet the particular needs of the time and country. A form that was almost perfect once may be useless to-day. A form that is well adapted to one nation may be totally inadequate for another.

(e) A brief study of each culture in comparison with the others.

(f) An idea of time and the position of each state in time. This should be established by drill methods, using time charts and other devices.

(g) Continual comparison and contrast of ancient and medieval states with those of to-day.

(h) An effort to guide pupils into thinking in terms of the people and age studied. They should realize that conditions and ideas of to-day differ from those of earlier times in many important respects. They should also realize that in other respects man has changed little, or not at all.

(i) The contributions of each state or culture.

1. Prehistoric peoples; a general survey; their position in time; old Stone Age; new Stone Age; material development; social and tribal organization; comparison with Stone Age men of later times—such as the Indians of North America.
   All texts: Chapter 1.
   DeWitt: Chapter 2 (American Indians).
   Breasted: Chapters 1–2.

2. Egypt; origin of a unified state; influence of geography on Egypt, especially with respect to food supply, government, and defence; form of government.
   West and Eastman: Chapter 2.
   DeWitt: Chapter 6.
   Tenen: Chapter 3.
   Breasted: Chapters 3–4.

3. The Empires of the Fertile Crescent; geographical facts and their relation to the histories of the various empires; walled cities; Babylonians and Hammurabi; Assyrians with their militarism and imperialism; Persians—government and roads.
   West and Eastman: Chapters 3–5.
   DeWitt: Chapter 5.
   Tenen: Chapter 2.
   Breasted: Chapters 5, 6, 8.

4. The Cretans; a maritime state; effects of sea-power; culture.
   DeWitt: Chapter 8.
   West and Eastman: Chapter 6.
   Breasted: Chapter 9.

5. The Phoenicians; mountains and timber made them seafarers; Tyre; Carthage; voyages to the tin islands.
   DeWitt: pages 85–88.
   West and Eastman: pages 54–56.
   Breasted: Chapter 10.

6. The Hebrews; conditions of soil and rainfall made them a pastoral people; organization and government characteristic

of pastoral peoples; relations to neighboring peoples; judges; kings; division into two states; captivity and dispersal.
DeWitt: pages 56–58.
West and Eastman: pages 56–60.
Tenen: pages 81–86.
Breasted: Chapter 7.
The Old Testament should be used as a text.

7. The Greeks; the mountains caused division and reduced farm land; good harbours; need for trade abroad; city states—Athens, Sparta, Thebes; evolution of democracy in Athens; Persian Wars; Philip of Macedon; Alexander the Great.
DeWitt: Chapters 9–11.
West and Eastman: Chapters 6–13.
Tenen: Chapter 5.
Breasted: Chapters 9–18.

8. Hellenistic civilization; effects of Alexander's conquests; new states; mixture of races and cultures; resultant civilization.
DeWitt: Chapter 12.
West and Eastman: Chapters 14–15.
Breasted: Chapters 19–21.

9. The Roman Republic; early political struggles; expulsion of kings; two consuls; tribunes; the Senate; the Gracchi; Julius Caesar.
DeWitt: Chapters 13–15.
West and Eastman: Chapters 16–22.
Tenen: Chapter 6.
Breasted: Chapters 22–26.
Cary: General reference.

10. The Roman Empire; form of government—dictatorship in democratic forms; famous emperors; the growth of bureaucracy; division into two Empires; causes of decline.
DeWitt: Chapters 16–17.
West and Eastman: Chapters 23–27.
Tenen: Chapter 7.
Breasted: Chapters 27–29.
Cary: General reference.
Collins: Chapters 1–2.

11. The barbarians; origin; characteristics; organization; the various nations; places of settlement, tracing their names on the map of Europe to-day; the new nations; Charlemagne.
DeWitt: Chapters 22–23.
West and Eastman: Chapter 28.
Collins: Chapter 4.

12. Feudal Europe; reasons for origin of feudalism; description in full.
DeWitt: pages 252–254.
West and Eastman: Chapter 30.
Collins: Chapter 11.

13. City republics of the Middle Ages; Italy; Low Countries; Germany; examination of reasons for their rise; democracy; gilds.
West and Eastman: pages 330–334.
Collins: Chapter 20.

14. The Papacy; political importance; survival of the Imperial idea; unity of Christendom; influence on Europe; Crusades.
West and Eastman: pages 282–288.
Collins: pages 103–109; Chapters 13, 15, 16, 22, 29.

15. The Arabian Empire; Mohammed; spread of Arab power; the caliphs; culture; Turks; clash with Christianity.
West and Eastman: pages 282–284.
DeWitt: pages 265–270.
Collins: Chapter 8.

16. The rise of national states; Spain; France; England; growth of national feeling.
DeWitt: Chapter 33.
West and Eastman: Chapters 32–33.
Collins: Chapters 17–19.

17. India; a brief consideration.
DeWitt: pages 190–201, 299–308.

18. China; a brief consideration.
DeWitt: pages 202–217, 309–325.

19. Civilizations of South America.
DeWitt: pages 25–26.

THEME 2.—STANDARDS OF LIVING (Obligatory).

The term *standard of living* includes: food, clothing, shelter, hours and conditions of labour, leisure, education, luxuries, and amusements.

1. The Hunting Stage:—man's early dependence on chance food supply; invention of weapons; hunting and fishing; discovery of uses, and control, of fire; cooked food; periodic scarcity of game led to migrations and famine; dwelling places; clothing.
DeWitt: Chapter 1.
Tenen: Chapter 1.
West and Eastman: Chapter 1.
Breasted: Chapters 1 and 2.
Quennell: *Everyday Life in Prehistoric Times.*
Wells: Chapters 8–14.

2. The Pastoral Stage:—domestication of animals made food supply more certain; animals domesticated; nomadic life; tent-dwellers; clothing; religion; tribal organization; tribal wars for pasturage and wells; story of Abraham; more extensive diet.
References as above.
Old Testament accounts of nomadic life.

3. The Agricultural Stage:—origin of agriculture; women probably the first farmers; early cereals; fixed dwellings; pottery; metal work; property in land; larger political organizations; change in diet; slave labor.

4. Earliest Agricultural Civilizations:—water supply and climate; irrigation in Mesopotamia and Egypt; material civilization based on plentiful food supply; division of labor; houses; materials for clothing.
DeWitt: Chapters 4–6.
Tenen: Chapter 2.
West and Eastman: Chapters 2–3.
Breasted: Chapters 3–8.
Wells: Chapter 16.

5. Greece and Rome:—scientific farming among the Greeks; writers on agriculture; large scale farming among the Romans; horticulture; fruits; vegetables; olives; grapes; diet; use of slave labor.
DeWitt: Chapters 9–16.
Breasted: Chapters 9–30.
Collins: Chapter 1–2.
Tenen: Chapters 5–6.
West and Eastman: Chapters 6–22.

6. Medieval Agriculture:—manorial system; the lord; manor house; serfs; the open field system; duties of the serf; lord's monopolies; backwardness of agriculture; crude implements; inferior stock; crop failures and famine; rise of towns; revival of trade and money economy, and their effect on agriculture; emancipation of serfs; the gilds; decline of manorial system.
DeWitt: Chapter 27.
West and Eastman: Chapter 30.
Collins: Chapters 12, 35.

THEME 3.—TRADE AND INDUSTRY (Obligatory).

General Considerations:

(a) The advantages gained through trading.

(b) Specialization and division of labor.

(c) The importance of transportation.

(d) The media of exchange.

The topics to be studied:

1. Primitive Peoples:—origin of industries; earliest man a "jack of all trades"; earliest industries; articles of trade; exchange by barter, theft, or war.
Tenen: Chapter 1.
West and Eastman: Chapter 1.
DeWitt: Chapters 1–4.
Breasted: Chapters 1–2, pages 299–308.

Quennell: *Everyday Life in Prehistoric Times.*
Wells: Chapters 9–11, 15, 17, 20.

2. Development of Trade and Industry in Early Civilizations:—discovery of metals—copper, silver, gold, iron; use of fire; the smith—the most important artisan; spinning and weaving; pottery; early trade in manufactured articles—pottery, weapons, utensils, articles of adornment; metals as media of exchange; coins; traders in money. Means of transport; pack animals; boats and ships; water routes; rise of cities as centres of industry.
References as above.

3. Trade and Industry in Egypt:—influence of the Nile; various industries; skill of workers; articles of export; spread of Egyptian civilization through trade.
Tenen: Chapter 2.
West and Eastman: Chapter 2.
DeWitt: Chapters 6–7.
Breasted: Chapters 3–4.
Wells: Chapter 16.

4. Trade and Industry in Mesopotamia:—industries; trade routes; trade wars; favorable location for trade.
Tenen: Chapter 2.
Breasted: Chapters 5–6, 8.
DeWitt: Chapter 5.
Wells: Chapter 16.
West and Eastman: Chapters 3–4.

5. Trade of Phoenicians and Cretans:—Phoenician craftsmen, traders, ship-builders; Tyrian purple; voyages of discovery; colonies; the Cretan Empire; legend of Minos; pottery and metal work; highly developed art; navy; trade relations.
Tenen: Chapters 2, 4.
DeWitt: Chapter 8.
West and Eastman: Chapters 5–6.
Wells: Chapter 16.
Breasted: Chapters 9–10.

6. Trade and Industry in Greece:—industrial knowledge from Asia; lack of materials in Greece; expansion in search of raw materials and markets; colonies; shipping trade; exports and imports; trade routes; extent of trade; organization of industry; decline of household industries; predominance of small work-shops; division of labor; slave labor and free labor; banking; money-lending; letters of credit; local markets; wholesale merchants; rise of commercial law; effect of wars on economic life of the Greeks.
Tenen: Chapter 5.
West and Eastman: Chapters 6–13.
DeWitt: Chapters 9–11.
Breasted: Chapters 9–17.

7. Trade and Industry in the Hellenistic and Roman Periods:—Alexander's conquests spread Greek civilization; hoards of gold captured in Persia put into circulation—effect on prices and business prosperity; new cities; city life; extensive foreign trade; expansion of industry in the Hellenistic period; Roman unification of the Mediterranean brought peace and prosperity; Roman law and its effect on trade; Roman highways; suppression of piracy; banking and coinage; effects of currency depreciation; organization of industry in the Roman world; small work-shops at first; later development of large-scale industry; labor; gilds; capitalism; development of corporations; position of the state in trade and industry; economic decline in the 3rd, 4th, and 5th centuries.
   Tenen: Chapters 6–7.
   DeWitt: Chapters 12–20.
   West and Eastman: Chapters 15–27.
   Collins: Chapters 1–2.
   Wells: Chapters 27–29.
   Breasted: Chapters 19–30.

8. Trade and Industry in the Middle Ages:—relative unimportance of trade in the 8th, 9th, and 10 Centuries; barbarian invasions; Mohammedan control of the western Mediterranean; industry confined to the manors; trade revival in the 11th and 12th Centuries, with reasons; Crusades; growth of cities; organization of trade; the merchant gild; the law merchant; fairs; local markets; commodities exchanged; trade with the Far East; hazards of trade; trade routes; organization of industry; craft gilds and their monopoly powers; industry in small work-shops; money-lending; banking; fair-letters; letters of credit; maritime insurance; Italian bankers; rise of capitalism.
   DeWitt: Chapters 17–30.
   West and Eastman: Chapters 19–24.
   Collins: Chapters 7, 19, 20, 21.
   Wells: Chapters 32–35.

THEME 4.—THE GROWTH OF HUMAN KNOWLEDGE (Optional).

Attention should be drawn to the following:—

(a) The slowness with which knowledge has been accumulated.

(b) The debt which man to-day owes to past generations.

(c) The methods by which knowledge is preserved and disseminated: writing, writing tools, writing materials.

1. Prehistoric Man:—curiosity about his environment; tools; fire-writing; the beginning of history.
   DeWitt: pages 10–12; Chapter 2.
   West and Eastman: pages 8–9.
   Tènen: Chapter 1.

Quennell: *Everyday Life in Prehistoric Times.*
Breasted: Chapters 1–2.

2. The Egyptians:—astronomy; astrology; geometry; need for this knowledge.
DeWitt: pages 71–73.
West and Eastman: pages 24–25.
Tenen: pages 31, 33.
Breasted: Chapters 3–4.

3. Mesopotamia:—astronomy and astrology; schools; note lack of contributions by military nations.
DeWitt: page 47.
West and Eastman: pages 42–44.
Tenen: pages 43–45, 48.
Breasted: Chapters 5–6, 8.

4. The great Greek thinkers, and their ideas:—Socrates' method of teaching; Plato's idea of the perfect state; Aristotle's organization of knowledge; the Stoics; the Epicureans; failure to use methods of observation and experiment.
West and Eastman: pages 85, 97–98, 125–130.
DeWitt: page 123.
Tenen: pages 168–177.
Breasted: Chapter 15.

5. The Hellenistic thinkers:—
West and Eastman: pages 157–162.
Tenen: page 175.
Breasted: Chapter 21.

6. The Romans:—how Rome drew on the knowledge of other peoples; Roman schools; Rome's contribution to the spread of knowledge.
West and Eastman: pages 253.
Cary: pages 271–272, 467–468, 696–698.
Collins: pages 20–26, 47, 49.

7. The Chinese:—scholars regarded as highest class in society.
DeWitt: page 37.

8. Europe in the Middle Ages:—influence of Aristotle; the Schoolmen; theology; law; medicine; Thomas Aquinas; Roger Bacon.
DeWitt: page 374.
West and Eastman: pages 335–338.
Collins: Chapters 24–25.

9. The Arabs:—medicine; mathematics; paper.
DeWitt: page 375.
West and Eastman: page 326.
Collins: Chapters 8, 19, pages 552, 771–773.

10. The Byzantines:—
West and Eastman.
Collins: Chapter 7, pages 402–404.

11. The Modern Age:—gunpowder; paper; printing from movable type; discoveries.
West and Eastman: Chapter 34.
Collins: Chapter 35.

THEME 5.—EXPRESSION, AND AESTHETICS (Optional).

The various methods by which man expresses himself are to be studied in this topic. These include speech and oratory, literature, music, painting, sculpture, dancing, the drama, and industrial art. The detail with which these are studied should depend on the interests of the pupils and the material available. Pupils interested in the theatre may be interested in compiling an outline of the development of the drama.

The following aspects of this theme should be brought out:

(a) Man's need of expressing his thoughts and emotions.

(b) Man's striving for aesthetic expression.

(c) The value and importance of art in life.

1. Prehistoric Man:—speech; art—its relation to magic; decoration of pottery and weapons; writing for communication; writing for the preservation of ideas and the beginning of history.
West and Eastman: Chapter 1.
Tenen: pages 10–11.
Breasted: Chapters 1–2.
Quennell: *Everyday Life in Prehistoric Times.*

2. The Egyptians:—architecture; painting; sculpture; various kinds and methods of writing; literature.
DeWitt: pages 75–79.
West and Eastman: pages 21–24, 27.
Tenen: pages 33, 77–79.
Breasted: Chapters 3–4.

3. The Fertile Crescent:—architecture and materials of construction; writing; literature.
West and Eastman: pages 42–43, 45–46.
Tenen: pages 42–45.
Breasted: Chapters 5–6, 8.

4. The Greeks:—greatest artistic geniuses of antiquity; decoration of pottery; painting; sculpture; oratory; the dance; the drama; literature; architecture.
DeWitt: pages 116–118, 120–122.
West and Eastman: pages 79, 82–85, 119–130.
Tenen: pages 130, 153–164, 178–186.
Breasted: Chapters 10, 15, 18.
Note pictures in all texts.

5. The Romans:—architecture; the drama; literature.
DeWitt: pages 166–169.
West and Eastman: pages 249–256.
Breasted: Chapters 27–29.
Cary: Numerous references; pictures.

6. Byzantine:—art; mosaics; architecture.
DeWitt: pages 355–357.
Collins: pages 157–158, 403–404.

7. Medieval Art in Europe:—architecture of churches, castles, and palaces; painting and its relation to the church; sculpture; literature.
DeWitt: pages 344–355.
West and Eastman: page 338; many illustrations.
Collins: Chapters 26–27.

8. India:—architecture; literature.
Encyclopaedia Britannica.

9. China:—literature.
DeWitt: pages 313 and 317.

10. American Art:—Aztec art; artistic expression among the North American Indians, their decoration of their persons and their weapons; folklore of the Indians.
DeWitt: Chapter 2.

THEME 6.—RELIGIONS (Optional).

The growth and refinements of religious ideas from the primitive beliefs of early man to the ethical religions of to-day. The following aspects of the topic should be examined:

(a) The founders, and origin, of each religious system.

(b) The influence of geographic environment on each.

(c) The relation of religious beliefs to art, music, poetry, and architecture.

(d) The relation of morality to religion.

(e) Elements of cruelty, severity, and sacrifice in early religions.

(f) The effects of persecution.

The result should be:

(a) A knowledge of the history of Christianity.

(b) A brief acquaintance with other important religions.

(c) A genuine respect for, and toleration of, the religious beliefs of other people.

1. The Religion of Primitive Man:—his fear of nature; belief in magic; ideas of morality; taboos; beliefs of primitive peoples existing in modern times.
DeWitt: pages 28–29, 42–43.
West and Eastman: page 3.

Tenen: pages 11, 18–20.
Breasted: page 21.

2. The Religion of Egypt:—the gods and their relation to life, spring, fertility, and harvests; idea of a sun-god, an approach to monotheism; temples.
DeWitt: page 67.
West and Eastman: pages 27–30.
Tenen: pages 65, 77.
Breasted: pages 70–71, 114–117.

3. The Religion of Babylon:—
West and Eastman: page 47.
Tenen: pages 43, 47.
Old Testament.
Milton: *Paradise Lost,* Book 2.
Breasted: pages 149–150, 174–175, 191.

4. Zoroastrianism:—relation to morality; good and evil.
West and Eastman: pages 52–53.
Tenen: page 106.
Breasted: pages 259–260.

5. The Religion of the Phoenicians (Philistines):—
Old Testament.

6. The Religion of the Hebrews:—belief in one God; literature; Solomon's Temple.
The Old Testament.
DeWitt: pages 56, 58.
West and Eastman: page 60.
Tenen: page 97.
Breasted: Chapter 7.

7. The Religious Ideas of the Greeks:—the Olympian Gods, and their relation to daily life, as, Demeter for the harvest; Olympic Games; ideas of morality; Stoics; Epicureans; relation of geography to lack of superstition; temples; idea of future life.
West and Eastman: pages 74–76, 96–97, 130.
DeWitt: pages 132–.....
Tenen: pages 165–168.
Breasted: pages 336–340, 476–478.

8. Buddhism and Hinduism: caste system.
DeWitt: pages 193–194, 200, 216–217.

9. Confucianism and Taoism:—
DeWitt: pages 208–211.

10. The Religions of Rome:—the gods of the state; the gods of the household; tolerance of foreign gods; ideas of morality.
West and Eastman: pages 204–212, 75.
Collins: pages 23–24, 45–46, 48–50.
Cary: 273–275, 468–469, 587–590, 696–698.

11. Christianity:—origin; missionaries; Christianity in Rome; rise of the Papacy; monasticism; Crusades; morality.
DeWitt: pages 185–189, 259–270.
West and Eastman: pages 266–272, 285–288, 311–315, 326–330.
Tenen: pages 251–254.
The Bible.
Collins: Chapter 3, pages 93–110; pages 129–135; Chapter 13; Chapters 22–23.

12. Mohammedanism:—origin; spread by conquest.
West and Eastman: page 282.
DeWitt: pages 240–246, 259–270, 302.
Collins: Chapter 8.

13. Protestantism:—Wyclif; Huss; Luther; translations of the Bible; popular education.
DeWitt: pages 390–398.
West and Eastman: pages 352, 369, 387.
Collins: pages 637–641.

14. Norse Mythology:—the gods; the days of the week.
Encyclopaedia Britannica.
Arnold: *Balder Dead.*

THEME 7.—SOCIETY (Optional and Experimental).

This Theme should be attempted only by those instructors who have special training in the social sciences. The following phases of this topic should be emphasized:

(a) The importance of the family in social organization.

(b) The methods and reasons for larger organizations.

(c) The basis of classes in society.

(d) The mixture of races, and the fact that purity of race is not important.

1. The Principal Social Groups:—the family; the clan (gens, sib); the tribe; the nation; the race.

   (a) The Family:—the unit of human society; functions; the bearing and rearing of children—their vocational, moral, and intellectual training; division of labor; choice of vocation; property; marriage; personal status; two types, patriarchal and matriarchal. Study the family life of early peoples: Egyptians, Hebrews, Greeks, Romans, Germans, American Indians, and Eskimos.
   DeWitt: pages 21, 136, 169, 204, 209.
   Pahlow: pages 64, 202, 298, 329.
   West and Eastman: pages 72, 94, 129, 132, 185, 205, 308.
   The Old Testament.

   (b) The Clan, Gens, or Sib:—the expanded family. Study clan organization among the Greeks, Romans, Germans, Scotch, and the American Indians.

DeWitt: pages 27, 136.
Gavian, Gray, Groves: *Our Changing Social Order* (Heath).
Lowie: *Primitive Society* (Liveright).

(c) The Tribe:—a loose term, but generally a group of clans; Greek tribes; Italian tribes; German tribes; Indian tribes; tribal governments; tribal customs; unions of tribes.
DeWitt: page 135.
West and Eastman: pages 11, 70, 164, 273, 279.
Lowie: *Primitive Society.*
Collins: page 82.

(d) The State:—essentially a political organization in a fixed territory; primary functions—legislative, executive, and judicial; forms—monarchy, oligarchy, republic, feudal state, combination and unclassifiable; privileges, rights, duties, and social status of people under the various forms of government.
DeWitt: pages 99–108.
West and Eastman: pages 12, 70, 79, 86, 298.

(e) The Nation:—definitions; characteristics; nationalism; relation between nation and state; importance of these ideas to-day.
DeWitt: pages 247–256, 376–387.
West and Eastman: pages 291, 297, 317, 322.

(f) Races of the World:—difficulty of classification; classication by color not reliable alone; four main groups recognized by most ethnologists are Caucasians, Mongolians, Negroes, and Australoids; subdivisions of main groups; division of Caucasians into Nordics, Alpine, and Mediterranean groups; race differentiation in Paleolithic times; subsequent migrations, spread of Indo-European language-stock, infiltrations, conquests, and inter-marriage; effects of physical environment and occupation on races.
DeWitt: pages 30–36, 80, 89–98, 147, 190–193, 202, 227–246.
West and Eastman: pages 67, 77, 296.
Wells: *Outline of History.*

2. Classes of Society:—class division is found in all society; the important classes of early societies and those of to-day; the bases of class division; varying importance of various classes; slavery and serfdom.
DeWitt: pages 24, 42, 62, 87, 152.
West and Eastman: Numerous references.
Collins: pages 80, 248–258, 427–438.

THEME 8.—PEACE AND WAR (Obligatory).

General Considerations:

(a) The causes and results of wars.

(b) The waste resulting from war: in property, lives, and human energy.

(c) The benefits derived from wars.

(d) The effects of wars in the rise and fall of civilizations.

(e) Attempts to prevent wars by alliances and unions.

(f) The fact that most men are not killers; that they must be herded into wars by conscription, and must be taught to hate their enemies; but also

(g) The fact that most men will fight for certain things that they hold dear—national freedom, political and economic liberty, and liberty of opinion.

Outcomes to be expected:

(a) An enlightened and objective attitude towards wars of to-day, and the causes of war.

(b) An intelligent desire for peace in our country and in the world.

The topics to be studied are:

1. Tribal Warfare:—wars among Indian tribes of North America.
   Quennell: *Everyday Life in Prehistoric Times.*

2. Wars of the Egyptians:—early strife for water, and the remedy; later imperialist wars; weapons; military class; conscription.
   West and Eastman: pages 12, 30–34.
   Tenen: pages 63–65, 70–74.
   Breasted: pages 104–108.

3. Wars of the Empires of the Fertile Crescent:—causes in general; imperialism of the Assyrians; weapons; walled cities for defense.
   West and Eastman: Chapters 38–39, 50.
   Tenen: pages 86–101.
   Breasted: Chapters 5, 6, 8.

4. Wars of the Hebrews:—conquest of the Promised Land; wars of defense.
   Tenen: pages 81–86.
   Breasted: Chapter 7.
   The Old Testament.

4. The Wars of the Greeks:—inter-city strife; the Spartan ideal; the Delian League; the Persian Wars; weapons, armour, tactics; value of sea-power.
   West and Eastman: pages 93–95, 100–114.
   DeWitt: pages 109–116.
   Tenen: pages 117–151.
   Breasted: Chapters 9–17.

6. Wars of Alexander the Great:—reasons for attack on Persia; military results; mixture of races and cultures; Alexander's

encouragement of learning and discovery.
West and Eastman: pages 149–162.
DeWitt: pages 125–133.
Breasted: Chapters 19–20.

7. The Roman Wars:—the early struggle in Italy; the Punic Wars and sea-power; wars of conquest for trade and safety; *Pax Romana*; the attitude of the early Christians to war.
West and Eastman: pages 192–201.
DeWitt: pages 139–150, 159–166, 169.
Tenen: pages 196–202, 209–216.
Breasted: Chapters 27–30.
Cary: Numerous references.

8. The Teuton Invasions:—search for fertile lands.
West and Eastman: pages 273–282.
DeWitt: 227–234.
Cary: Many references.
Tenen: pages 258–266.
Collins: Chapters 4, 10.

9. Feudalism:—a system born of war; neighbourhood war; the Truce of God.
West and Eastman: pages 298–311.
DeWitt: pages 252–254.
Collins: Chapter 11.

10. The Crusades:—causes and motives; effects on Europe.
West and Eastman: pages 326–330.
DeWitt: pages 293–294, 265–270.
Collins: pages 401–425.

11. The foregoing experiences of early peoples should be related to peace efforts in our own time; the successes of peace efforts should be stressed, and not the failures.

Every step in this Theme should be related directly to what has already been taken in Theme 1.

Note.—Principal causes of war to be deduced:

1. Territorial:—wars of conquest.

2. Dynastic:—wars for the glory of rulers.

3. Commercial wars:—wars for trade advantage, or for the destruction of trade rivals.

4. Strategic wars:—wars to prevent attack at a later date.

5. Wars of ideals:—wars on account of religion; Fascism versus Communism to-day.

Motives inducing men to fight:

1. Idealism:—belief that the war is for a worthy motive.

2. Love of adventure.

3. Hero worship:—the tendency to follow an honored leader.

4. Desire for personal glory.

5. Greed: the hope of land or other plunder.

HEALTH EDUCATION

N.B.—This outline is incomplete. An announcement regarding it will be made during the year.

UNIT 1.—HOW WE ARE MADE, AND HOW WE GROW AND DEVELOP.

A.—How the body is made.

1. All living things are made of cells.
2. Cells are made of a complex substance known as protoplasm.
3. Cells reproduce by mitosis, or cell division.
4. There are five different kinds of cells in the body:—skin, muscle, nerve, connective, blind.
5. Cells of the same kind are grouped together to make tissues.
6. Tissues unite to perform a definite function, and so make an organ.
7. Organs function together to carry on body processes, and so make a system.

B.—How we began.

1. Simple forms of life reproduce by cell division, and by budding, e.g., bacteria, amoeba, yeast plant.
2. Higher forms of life reproduce themselves by special sex cells.
   (a) Sex cells have a special structure—the nucleus contains a dense substance known as chromatin.
   (b) Parent cells unite to make the first cell of a new individual.
   (c) This first cell reproduces itself by cell division; later, cells become specialized, that is, develop into skin cells, bone cells, muscle cells, etc.
   (d) Heredity means that certain characteristics are carried on in the chromatin of the nucleus.
   (e) Heredity may influence health. (Diseases are not inherited, but a certain physical set-up is, and so some individuals are more subject to certain diseases than others.)
   (f) Many latent defects in heredity never develop if a person lives in a healthful way.
   (g) It is important to face problems pertaining to sex in a frank, straightforward way. (Special problems may be dealt with here if girls and boys are taught separately.)

UNIT 2.—HOW TO DEVELOP OURSELVES SO WE MAY GET THE MOST OUT OF LIFE.

A.—Developing our personality.

1. Life is a quest for happiness. What is meant by happiness? How can it be obtained? What makes us dissatisfied and unhappy?
2. We should take stock of our abilities. Satisfaction comes through accomplishment; a feeling of inferiority develops if we cannot excel in any particular work or sport; perseverance is important to accomplishment.
3. We should learn to like people, and make people like us. Learn to be friendly—be interested in others and what they are doing; help others to learn a new game, or do a new job; be a good sport; take responsibility; be a leader sometimes.
4. We should learn to manage our emotions.
5. We should make good use of our leisure time.

B.—Making the most of our personal appearance.

1. Neatness and cleanliness make us look smart:—clothes neat and trim; hair well kept; clean, well-trimmed nails; no body odors; shoes clean, heels straight.
2. Choose clothes wisely:—best clothes for school, for sport, etc.
3. A good complexion is important:—factors influencing our complexion; use of cosmetics; how to prevent and treat pimples and blackheads.
4. Good posture gives us a feeling of well-being, of confidence, and makes a favourable impression on others.
5. Certain health practices have an effect on our appearance and our ability to do things—enough rest, a well-selected diet; doing things out of doors.
6. Our teeth are important to our appearance:—a good diet keeps teeth from decaying; go to a dentist frequently; don't be "taken in" by the many advertisements of dentifrices.

C.—Keeping well.

1. Some diseases are more common to young people. This is particularly true of tuberculosis. It can be prevented. Modern means of detecting tuberculosis, e.g., tuberculin test, X-ray, etc.
2. Importance of being vaccinated.
3. Dangers of diseased tonsils and adenoids, and of abscessed teeth.
4. What causes colds; meaning of virus infection; recommended treatments for colds.
5. How to prevent yourself from getting diseases from others: washing hands before touching food; use of own towel and

other toilet articles; keeping up a high resistance. How inoculation and vaccination build up immunity.

UNIT 3.—HELPING TO KEEP OTHERS WELL AND HEALTHY.

(This unit is especially adapted to a school where boys and girls could be taught separately.)

For Girls:

A simple course in home nursing and care of the sick.

For Boys:

Lessons in first aid and prevention of accidents.

REFERENCE BOOKS FOR TEACHERS AND PUPILS.

Best and Taylor: *The Human Body* (Gage).

Peabody and Hunt: *Biology and Human Welfare* (Macmillan).

Eastwood: *Hygiene for Students and Teachers* (Macmillan).

Gamlin: *Modern School Hygiene* (Copp Clark Company).

Phillips: *Skin Deep* (Vanguard Press).

Kallet: *One Hundred Million Guinea Pigs* (Vanguard Press).

De Kruif: *Men Against Death* (Harcourt Brace).

Delano: *American Red Cross Text-book,* or *Home Hygiene and Care of the Sick* (P. Blakiston's Son & Company).

Home Nursing (Canadian Red Cross Society, Toronto).

First Aid (Canadian Red Cross Society, Toronto).

First Aid to the Injured (St. John Ambulance Association).

DRAMATICS

INTRODUCTION.

In view of the fact that the outline for Dramatics appearing in the Programme of Studies for Grade IX was originally intended as a general introduction to a three-year course, much of the same material can be utilized in the programme for Senior High Schools. It is thought that the work offered in Grade IX should be reviewed, intensified, and further developed, in Grade X, with more difficult plays for study and production. The third year, offered as an option, in XI or XII would include history of the theatre and drama, study of the full-length play, easy dramatizations of class-room material. The third year should equip students for teaching or for taking a lead in community dramatics. The committee is strongly of the opinion that particular stress should be laid upon *Voice* and *Diction* throughout the course, especially as the English course has been shortened.

The course should be based on the project method; the first project being, perhaps, the production of a programme of one-act plays. The chronological outline of the course should be very loose, in order to give the teacher freedom in shaping the work to particular needs or inclinations. The course could begin with the reading of interesting plays by the teacher, followed by discussion and explanation. Then the same plays, or others, could be read by the pupils in turn, problems of acting and voice and characterization being gradually introduced. The next step might be pantomimes or concentration exercises arising from the play; this is an excellent means of developing the technique of acting; following this the learning of the words, with the consequent voice problems. With the plays comes practice in the various theatre arts,—settings, costume, lighting, make-up. The occasional period can be taken to recapitulate the knowledge thus gained, a small amount of theory thus going hand in hand with practice. In Grade X the teacher should be free to study either a group of one-act plays or a full-length play; with large classes, short plays and duplicate casts; with small classes the intensive study of a full-length play. Voice Production and Body Control exercises could be given for five or ten minutes at the beginning of each class.

At convenient times during the course, the pupils could report on plays they have read or seen, including moving pictures. Such reports could sometimes be given orally, and correlated with Voice Production, although too much emphasis should not be placed on this aspect of the work.

The testing of the pupils' work should relate to the following:—(1) neatly kept scrap-books; (2) definite improvement in Speech, as evidenced by interpretative reading, sight reading of a prose passage, participation in a play, oral report on some phase of the

REFERENCE BOOKS FOR TEACHERS AND PUPILS.

For a full list, see the outline in Dramatics for the Intermediate School.

The three following are very useful:

Ommanney: *The Stage and the School.*

Selden: *A Players' Hand-book.*

Fish: *Drama and Dramatics.*

RECOMMENDED BOOKS OF PLAYS.

Bourne: *Eight New One-act Plays for 1933* (Lovat Dickson).

Boas: *Short Modern Plays* (Macmillan Company).

MUSIC 1

GENERAL STATEMENT.

The aims of the High School Music Course are three:—to deepen the student's love of good music; to enable him to better understand what he hears or performs; and to develop his performing technique.

The effects upon the student in the pursuit of these aims may be listed as follows:

(a) Increasing appreciation and understanding of good music.

(b) Widening his experience of the art.

(c) Acquiring the habit of concentration upon musical values.

(d) Discovering to the student the kind and strength of his musical interests and aptitudes.

(e) Providing an avenue for the furtherance of his social co-operation.

(f) A general refining influence.

(g) Developing technique in performance.

A fully rounded-out Music Course for High Schools includes the following departments of musical activity and study:

1. Chorus Singing.
2. Elementary Theory.
3. Ear-training and Sight-singing.
4. Music Appreciation.
5. Harmony.
6. Orchestra (or Band).
7. Glee Club.

Chorus singing is the basic musical activity in any school Music Course. It requires careful management in the assignment of voices to parts; in the choice of material as related to physiological as well as psychological maturity and technical ability of the student; also in the purpose underlying the plan of procedure. Success should not be measured in proportion to the physical exhilaration manifested in singing, but the work should be viewed from the standpoint of a choral study-class. Music should be selected to illustrate specific points of interpretation, style, form, and period of composition. It should, at all times, be the joyous endeavour of the chorus to make advancement in production of the voices, beauty of tone, balance of the parts, incisive enunciation, well moulded phrases, flexibility, precision, shading, mood, and imagination.

While in Grade IX the emphasis may well be upon songs whose texts carry a strong emotional appeal, in Grades X, XI, and XII more attention should be given to music in its absolute phase. Divested of text, the music in these Grades should lose nothing of its interest. Beauty of tone blending, tone procedure forming beautiful melodic contour and balance of phrases, part leading, and beautiful harmonic progressions, form a tonal discourse that should engage the keen interest of the class and nourish the appreciation of musical texture and mood. Music if not studied for itself can hardly lay claim to a deserved place on the curriculum.

Class work in *elementary theory, ear-training,* and *sight-singing* is necessary to give the student a period of concentrated study in the mechanics of musical construction, for the purpose of imparting an intimacy with the elements of musical notation. In training the aural recognition of all commonly occurring rhythmic types and figures, as well as chromatic inflections, it is an important adjunct to the Chorus Singing Course. Such a class is especially valuable in schools where a number of the students have had no public school music training.

A certain amount of incidental study of *music appreciation* may be carried on in conjunction with the chorus class; it is, however, necessarily limited in scope, being confined to the particular music or composer under study. A more comprehensive Course in the appreciation of music is a vital necessity in High Schools, to provide an opportunity for a broad outlook over the field of music in general. Such a course is particularly suitable in Grades X, XI, and XII, following the musical experience gained in Grade IX. The habit of critical listening is cultivated. Lessons are derived through the hearing of a considerable quantity of the best music literature; and an intelligent idea of music forms, history, biography, and aesthetics is gained therefrom, which, in the main, constitutes the work in music appreciation.

Such a course is made practicable through the use of phonographic records. The development of music form and styles can be traced from the earliest times. The distinctive style of individual composers and of "schools" of composers can be comprehended. The various media of musical expression can be illustrated. Biographies of great composers and musical executants may be taught, and the main themes of great compositions, through repeated hearings, committed to memory. It bears the same relation to music education as the subject of Literature, and its history bears to the study of English.

Harmony properly applied in the High School should mean ear-training of an advanced order as compared with that received in the earlier Music Courses. It is an exploration of the conventional chord material upon which music is constructed. While the study must necessarily involve a consideration of the laws by which chords are grammatically connected, the study must not be allowed to lapse into the mechanical working of exercises whose main purpose is to train one in the avoidance of errors in part-writing. Rather, should it be to the purpose of enabling the student to give

a proper harmonic setting to the products of his musically creative instincts. Rules should follow, rather than precede, practice. There should be more harmonizing of melodies than of figure basses. The taste should be cultivated for aptness and purity of effect in chord arrangements, progressions, and part-leading.

When *orchestra* classes are maintained in Public Schools, there will be no difficulty in organizing fair sized orchestras in the High Schools. But, even where such classes have not existed, all High Schools should, if at all possible, organize orchestras. The nucleus may be nothing more than a few violins and a piano. With sympathy from the school staff and educational authorities, interest will be generated and other instruments added. It may then become the duty of the local School Board to provide teachers for classes in violin, clarinet, cornet, etc., and to procure for the school those instruments not so popularly found in the homes, as the flute, oboe, 'cello, French horn, stringed bass, and drums, and also make some provision for instruction on them.

Glee Clubs should be drawn from the chorus classes of Grades X, XI, and XII, the voices selected by test. Clubs of not more than 32 to 36 (8 or 9 to a part) do the best work. By reason of their more advanced vocal proficiency, they are able to do chorus work of a finer quality and more difficult grade than produced in the regular chorus classes.

The chief aim of the Music Course is to enable pupils to acquire increasing enjoyment in music, both in school and in later life. The Course does not aim to produce professional musicians.

OUTLINE OF COURSE.

GRADE X.

Chorus Singing.

While the study and performance of part-songs and choruses should feature more prominently than in Grade IX, a certain number of unison songs should be included, these latter more particularly for the individual sections of the chorus. The music selected should represent folk-songs, classical songs, songs with descant, and modern part-songs. Rounds, canons, and other music, with imitative part-movement, should be studied. Variety, both in the style of the music, and in the composers represented, is essentially important. While easy contatas may be used, a class spending most of the year in preparing a cantata would fail in meeting the requirements of the Course.

Part-songs are for:

(a) Soprano and alto; soprano and second soprano; soprano and bass; tenor and bass.

(b) Soprano, second soprano and alto; soprano, alto and bass; soprano (or alto), tenor and bass.
Part-songs including tenor are optional, as some schools may be unable to find a sufficient number of tenor voices.

(c) Soprano, alto, tenor and bass. (See note above).

Recommended Song-books.

Halcyon Song Book (Silver Burdett Company).

Cantemus, Books I and II (Curwen & Curwen Company). (*Cantemus* is for soprano, alto, and bass only.)

Junior Songs; Hollis Dann (American Book Company).

A full list of supplementary song-books, operettas, carols, rounds, canons, songs with descant, individual part-songs, etc., will be supplied on request, from the Department of Education.

Elementary Theory.

Relative values of all notes and rests in common use. The tie; the slur; sharps, flats, naturals, double sharp, and double flats. Treble and bass clefs; the alto and tenor C clefs. All major and minor scales with their signatures. Tones and semitones; accent; measures; time signatures, in both simple and compound time. Irregular note-groups to the beat. The barring of simple passages. Tempo indications, marks of expression and interpretation in common use. The technical names of the scale degrees. Intervals and their inversions.

Recommended for Use as Text-books.

Stewart Macpherson: *Rudiments of Music.*

Charles W. Pearce: *Rudiments of Musical Knowledge.*

Blancke and Speck: *A Gateway to Music* (D. C. Heath & Co.).

Ear-training and Sight-singing.

1. Recognizing and staff notating in any of the nine common keys, 3-, 4-, 5-, and 6-note phrases, including no other chromatics than the sharpened 4th *fi*, and the flattened 7th *te*. The two chromatics in their simplest progression only. Distinguishing amongst 2-pulse, 3-pulse, 4-pulse, and 6-pulse measure in sentences sung or played. Aural recognition of the simpler rhythmical types and figures. Writing on a line of the staff the rhythmical outline of a musical motive sung or played. Applying the *so-fa* names to short groups and phrases. Recognition of major and minor triads in root positions and inversions, when played on the piano; also distinguishing any of the notes of a 3-part chord after hearing the chord played; distinguishing the tone qualities of the more common orchestral instruments in each of the orchestral sections.
2. Regular practice in sight-singing. For this purpose, exercises may be found in Books II, III, and IV of *777 Graded Exercises in Sight Singing for Schools* (Eagleson), published by the Institute of Applied Art, Edmonton.

Music Appreciation.

The purpose is to acquaint the student with the great literature of music in such a way that he may study it in the light of the times in which it was composed, and note the manner of development of its various forms. The success of the Course depends on

the presentation of a considerable amount of music arranged to show the progress of musical art from the earliest times. Pupils are expected to memorize many of the more impressive themes from masterpieces and other works representative of the composer's individual style.

The influence and nationality may be shown, and the evolution of the art down through the various periods of musical composition —the model polyphonic period, the medieval period, the contrapuntal, the classical, the romantic, and the modern period.

The Course should include short, pointed lessons on the rise and development of opera and oratorio, and brief, biographical studies of the great masters, supported by performance of excerpts from their more celebrated works.

In review and extension of the Appreciation Course set for Grade IX, the following are the topics under which the Course will be conducted:

The various media of musical expression.

Vocal classifications:—the soprano voice, alto, tenor, baritone, bass; their differentiations, as, lyric, dramatic, coloratura, robusto.

Vocal and choral combinations.

Further studies in the quality and capability of orchestral instruments.

Instrumental and orchestral combinations.

The simple elements of form, growing out of a consideration of balance of design in melodic construction.

Song types:—folk-song, popular song, patriotic song, ballad, lied, aria, chanson, art-song.

Opera and oratorio:—their form features illustrated. Selections from these large music forms showing development from period to period.

Instrumental forms:—music illustrative of suites, dance forms, the fugue, sonatas, string quartettes, overtures, the symphony, tone poems.

Note-books should be kept by the pupils in which the outline of each lesson is recorded. The books should, periodically, be examined and marked.

Recommended for Use as Text-books.

Fryberger: *Listening Lessons* (Silver Burdett Company).

Creighton: *Music* (Chatto and Windus).

The Student's Work-book in Music Appreciation (Clarke, Irwin Company).

The Teacher's Hand-book for the foregoing (Clarke, Irwin Company).

Anne Shaw Faulkner: *What We Hear in Music* (R.C.A. Victor Co., Inc.).

In this book will be found complete lists of phonographic records, with descriptions and numbers, to support the above outline of work.

Orchestra.

Musical practice undertaken through membership in a school orchestra or band will be accepted for credit in lieu of the Course in Ear-training and Sight-singing, provided that the following conditions have been met:

1. The orchestra or band must be under the direction or supervision of the school.
2. The members must meet regularly for practice under a competent conductor, the practice sessions occupying at least two hours per week throughout the school year.
3. It must master a repertory of at least **ten** selections during the year, these to be of medium difficulty, of good quality, and representing different types.

Such music as the following will be regarded as satisfactory:

Orchestra:

Selections from Faust (No. 190), (Oliver Ditson Company).

Arabian Nights Suite (No. 351), (Oliver Ditson Company).

Ditson Concert Orchestra Folio (15 and P.), (Oliver Ditson Co.).

Amateur Orchestra Folio (15 and P.), (Oliver Ditson Co.).

Bohemian Girl (arranged by Barnard), (Filmore Music House).

Moment Music (Schubert), (Carl Fischer Company).

Album Leaf (Wagner), (Carl Fischer Company).

Amateur Orchestra Journal, Volumes II, III, and V.

Progressive Orchestra Book (Willis Music Company).

String Orchestra:

Operatic Airs (Recker), (6 first violins, 4 seconds, 1 'cello); (Leo Feist Publishing Company).

Minuet, No. 2 in G (Beethoven), (Carl Fischer Company).

Dawn of Love (Bendix), (Carl Fischer Company).

Band:

March *Boy Scouts* (G. L. Barnhouse Company).

Chimes of Normandy, No. 4 (Oliver Ditson Company).

Selections from *Tannhäuser* (Wagner) No. 1181 (Fillmore Music House).

Operatic Reminiscences (*Amateur Concert Journal*) (Carl Fischer Company).

Overture *Northern Lights* (Walter Jacobs).

March *Legion of Honor* (J. W. Pepper & Son).

Glee Club.

The members of this Club may be drawn from Grades X, XI, and XII. The better voices of the chorus class are selected by test, and a good balance of parts obtained. The Club should not be less than 16 in number, or more than 38. Provided that they are under efficient conducting, meet for practice twice a week throughout the school year, and that the quality of the work done is of a higher standard than that of the chorus class, they may select Glee Club in lieu of Ear-training and Sight-singing.

Song-books:

Hollis Dann: *Assembly Songs* (H. W. Gray Company).

Universal Song Book (Hinds, Hayden & Eldredge).

(*Assembly Songs* is for girls' voices only; the *Universal Song Book* is for various combinations of voices, including alto-tenor, and optional and required bass parts.)

A list of individual part-songs, published in octavo form, may be obtained by applying to the Department of Education.

ART 1

INTRODUCTION.

This Course is intended for students of High School age who may elect Art as a subject; for those who need a knowledge of design to correlate with the Home Economics and General Shop Courses; and for those who intend to qualify for Normal Entrance.

It is based on the assumption that all men and women need a full understanding of what constitutes beauty in form and colour in the things that make up their ever-changing environment.

The aim of the Course is to develop in the mind of the student aesthetic standards by which to evaluate all works of art relating to the individual, the home, and the community, and to aid in releasing and directing his creative energy.

As design is the basis of all Art, the study of the underlying principles should lead to a finer aesthetic discrimination on the part of the student. Added to this, wide experience in the selection, adaptation, and creation of beautiful form and colour should develop good taste, appreciation, and power of artistic expression.

In this revised Course, a departure has been made from the former practice of assigning a stated number of exercises to be completed during the year. Instead, it is required that each teacher of the Course shall thoroughly acquaint himself with its object, details, and methods. Then, after having made himself thoroughly familiar with the subject, he can plan exercises in line with the ideas of the Course. This outline is purely suggestive and flexible, so that teachers will develop any phase in which they themselves, or their classes, are particularly interested. The teachers are urged to encourage individual interest and originality, and never to be afraid, if the chance offers, to step outside, or go a little beyond, what the Course offers.

Each student should take Art Structure, Drawing and Colour, and **any two** of the following:

(a) Picture Analysis, **or** Appreciation of Applied Arts.

(b) Illustration and Lettering.

(c) Creative Design.

(d) Craft Projects.

(e) Interior Decoration.

(f) Costume Design.

Since four periods per week have been allotted for class instruction in this subject, it is to be expected that considerable time will be spent outside of instruction time on the completion of problems. All problems in Design should be developed in the

class. The application to Craft Projects may be worked at home and brought in from time to time to show progress. The collection of illustrations in the Appreciation of Applied Arts will be an out-of-class activity.

It is expected that each student will make some type of portfolio or container suitable to preserve all drawings and sketches. Rough sketches should be kept to show the development of ideas to the finished result.

Teachers will find helpful reference material in the following:

REFERENCE BOOKS.

Art Structure:

Dow: *Composition* (Doubleday, Page & Company).
Goldstein: *Art in Everyday Life* (Macmillan Company).

Picture Analysis:

Littlejohn: *How to Enjoy Pictures* (A. & C. Black).

Helen Gardner: *Understanding the Arts* (Harcourt, Brace & Company).

Sir Martin Conway: *The Book of Art for Young People* (A. & C. Black).

Good magazine illustrations, as in *Country Life, Arts and Decoration, The International Studio.*

Appreciation of the Applied Arts:

Gardner: *Art Through the Ages.*

The National Geographic Magazine.

The Illustrated London News.

The Connoisseur.

Day Museum Prints (Reeves).

Craft Work:

F. J. Glass: *Artistic Practical Handicraft Series.*
Craft for All Series (Pitman Publishers).

ART STRUCTURE.

Aims:

1. The application of the principles of design.
2. The filling of given areas with well-balanced form and colour.
3. The developing of line patterns and mass patterns.

Problems:

1. Make static and dynamic rhythm forms in self-contained areas (line patterns).
2. Make Notan patterns in self-contained areas, developed in charcoal, and completed in colour.

Note.—*Notan* is the term for contrast of value.

3. Make border repeats in alternations or series.
4. Make surface patterns, as for textiles, or for end papers of a book.
   (a) Subdivision of the surface by squares, bricks, diamonds, ogees, or circles.
   (b) Placing of simple motifs within the resultant areas, or at intersections, or both.
   (c) The working out of a value arrangement in not more than five steps in colour.
   (d) 'Patterning" surfaces as contrasted with flat colour.

DRAWING.

1. (a) Single objects in **line** (including third dimension), as packing-box, carton, fruit-basket, coal-oil can, nail-keg, tub. Line brush drawing may be used.
   (b) Single objects in **light** and **shade**, as vase forms, bottles, lamps, kitchen utensils. Charcoal, wash drawings, or dry brush may be used.
   (c) Groups of three or four objects, with emphasis on **composition** first, then the **drawing**, as, (1) cones, cylinders, cubes; (2) manufactured objects.
2. Pose drawing:—20-minute sketches to be done at regular intervals throughout the year.

COLOUR.

Value scales in 7 or 9 steps.

Intensity scales in 7 or 9 steps.

Flat washes applied to drawing groups. (Compositions as in 1 (c) above.)

Application in the problems that follow.

ILLUSTRATION.

Historic events.

Stories from Literature.

Dramatic incidents in a play.

Imaginative Drawing.

This work will be an application of composition ideas gained from picture analysis, combined with pose, drawing, and color.

PEN LETTERING.

Letters in tone pattern and space filling.

Open-closed letters. (See *P's and Q's*, by Tannahil.)

Page arrangements.

Paragraphs in pen letters with initial letters and fillers.

CREATIVE DESIGN.

1. Clay, or soap, or *papier-mâché.*
2. Block prints, by use of potato-cuts or turnip-cuts.
3. Stencilling:—negatives developed and cut. Special care with ties and notan effects. Stippling or spraying of paint or dye on material.
4. Leather:—decorative pattern, with thonging and lining of article, as, book supports, book jackets, purse.

PICTURE ANALYSIS.

The idea of design can be strengthened if reproductions of pictures by old and modern masters are analyzed for their design qualities, as distinct from their representative, religious, moral, or anecdotal qualities. Students may practise such analysis in line and tone, reducing the form to an abstraction stripped almost entirely of its representative quality; and remembering that it is design that is being sought—the relationship between the parts, and no part for itself. Other methods of approach to picture analysis may be used, the object being to induce the student to look at the picture, to really see and enjoy its composition, and not merely to memorize facts about it or the life of the painter.

A set of colored pictures of marked interest in design of line, mass, or tone, is suggested; such as the following:

Darimier: *The Washerwoman.*

Vermeer: *Lady with Lute,* and *Young Lady with Water Jug.*

Monet: *Rocks of Belle Isle,* and *Fishing Boats.*

Velasquez: *Lady with Fan,* and *Surrender of Breda.*

Raphael: *The Ansidei Madonna.*

Millet: *The Gleaners.*

Titian: *Lavinia,* and *The Tribute Money.*

Van Gogh: *Garden in Arles.*

Seurat: *Le Arque.*

Renoir: *Girls at a Piano.*

Burne-Jones: *The Golden Stairs.*

Whistler: *Battersea Bridge.*

Other sources:

Good examples of photography.

Good magazine illustrations, as in *Country Life; Arts and Decoration; The International Studio; The Artist.*

When students are to be tested in appreciation of good composition, it is suggested that compositions other than those used in class-work be used, so that picture study becomes a stimulus to looking at pictures, and an exercise in judgment leading to appreciation of the art quality in pictures.

CRAFT PROJECTS.

"A finished model to give the greatest satisfaction must not only show good craftsmanship, but must be functionally fit, structurally sound, and artistically pleasing."

The students taking General Shop are expected to develop designs to be worked out as shop projects. A minimum of three designs is suggested for this section of the Course.

Suggested Problems in Woodwork:

Design for a gate-leg table, end-table, library table, radio case, piano bench, hall stand, writing desk, floor-lamp standard and shade, chip carving panels or borders.

Suggested Problems in Sheet-metal:

1. Design contours for bowls, cake plates, book ends, plaques.
2. Repoussé designs for plaques, medallions, trays, trophy-shields, ornaments, door-knockers.
3. Etched metal designs for ash-trays, desk sets, name-plates.
4. Saw-pierced designs for objects similar to those in (2) and (3).

Suggested Problems for Forging:

Designs for grill, hearth-fender, lamp bracket, business-sign, umbrella-stand, footstool.

Suggested Problems in Cement:

Panel design, garden ornament.

INTERIOR DECORATION.

1. Study of the materials used. Collect samples, and name typical floor coverings, wall coverings, drapery and curtain fabrics, upholstery materials.
2. Make floor plans (scale drawings) of the placing of furniture for balanced groups.
3. Discuss—
   (a) Scale of furniture for rooms of various sizes.
   (b) Ratio of patterned area to plain area.
   (c) Colour in relation to exposure.
   (d) Value in ceiling, walls, trim, and floor.
4. Make elevations of the same room as made in floor plan, showing furniture and wall arrangements in color.

COSTUME DESIGN.

This work should be a follow-up to the costume design of the Intermediate School. Figures sketched in the pose drawing may be used as lay-figures. On these develop clothing drawings based on design principles.

Discuss the distinction between costume design and fashion drawing.

Study **line in dress.** Strong lines, graceful lines, weak lines. Line by contours, line by pattern in material, line by trimmings, line by construction. Make drawings illustrating the use of these. Collect illustrations showing weak line.

Discuss the effect of line correctly used to camouflage abnormalities. Draw clothing for short, slim type; tall, slender; short, stout; tall, angular; and tall, broad types.

APPRECIATION OF APPLIED ARTS.

This subdivision of the work is especially planned to correlate with Social Studies (Theme 9) and the General Shop Course.

Make collections of reproductions of examples. Mount these. This may be either a class collection, or individual collection. Class criticism. Stress fitness to purpose.

Suggested Topics:

Primitive Tribes:—tools, weapons, pottery utensils, articles of personal adornment.

Babylonian Arts.

Egyptian:—furniture, jewelry, buildings.

Greek:—pottery, metal objects, architecture, sculpture.

Roman:—metal objects, glass (Pompeiian), architecture, sculpture.

Byzantine:—mosaics, dress.

Medieval:—manuscripts. *Book of Kills.* Objects in gold and silver.

Renaissance:—ancient art, revived architecture, bronze sculpture.

GENERAL SCIENCE 1

INTRODUCTION.

Curriculum makers have agreed that a science sequence is desirable. In the Intermediate School is outlined an exploratory, environmental sequence called General Science. The traditional secondary school curricula have followed the logical division of science into physics, chemistry, biology, and the like; or of physics into heat, light, electricity, and machinery. We live in a physical world, and the demands of life come without regard for academic subject divisions. The preservation of food, for instance, may involve at least physics, chemistry, and bacteriology.

This course in General Science largely disregards all artificial divisions into specialized fields of subject matter. The subject-matter content covers the ground that is to be found in the accepted pattern of General Science courses. In extending this science sequence into the secondary school, the revising committee has retained the unifying theme that, as members of society, we should have an intelligent attitude toward the universe in which we live. Such an attitude can be developed only as we make an attempt to understand man's environment and his attempts at control of the environment; of the forces of the earth, including those which operate within his own body. To-day the school is shifting its emphasis from information, as the sole objective of education, to right attitudes and ideals, and to proper response to actual life situations.

Facts are necessary, but it is the relationship of facts to each other that is important. As in previous courses in this science sequence, the revising committee emphasizes the scientific method of thinking. We must inculcate in our students the habit of thinking from cause to effect, and back from effect to cause. At the same time we must furnish a fund of scientific information that will help the students to interpret their environment.

Science reading is an effective means of instruction. Reading should be organized and assigned definitely to encourage students to extend their science training beyond the school period. A number of carefully selected reference books should be available to the students. They should be encouraged and directed to the reading of popular literature in the field of science. The teacher should stimulate interest in a scientific article; make the magazine or book containing it available to the class; or ask one or more students to make a report to the class.

General Science should employ excursions to fields, woods, museums, and industries, where actual examples may be found of phenomena studied in class. After the return to the school, reports and discussions should follow. Interest should be stimu-

lated toward further study—reading, observation, or construction —either by individuals or by groups.

The connecting thread in this course is the study of energy. Life is presented as a complex of energy transformations. Living things make use of supplies of energy and material; their activity is determined by the supplies of energy that they can tap.

REFERENCE BOOKS.

Reed, Rexford and Carroll: *Useful Science for High Schools* (1935), (The John C. Winston Company).

Pieper and Beauchamp: *Everyday Problems in Science* (1936), (W. J. Gage & Company).

Wood and Carpenter: *Our Environment,* Book III (1934), (Allyn and Bacon).

Watkins and Bedell: *General Science for To-day* (1936), (The Macmillan Company).

Powers, Neuner, and Bruner: *A Survey of Science* (1935), (Ginn and Company).

TEXT-BOOK.

T. B. Allen and W. P. Ferguson: *Elementary Science* (The Ryerson Press).

The following selected Chapters will constitute the body of material to be taught in this Course:

Chapter II. "The Earth in Relation to Other Heavenly Bodies".
Teach the following sections only:
Section 3. Latitude and Longitude.
Section 4. How Time Is Measured.

Chapter IV. "The Production and Use of Heat".
Teach the whole Chapter.

Chapter VII. "Industrial Application of Water Pressure".
Teach the whole Chapter.

Chapter IX. "Putting the Air to Work".
Teach from section 6, Pumps and Siphons, page 212, to the end of section 12, Measurement of the Amount of Moisture in the Air, page 230.

Chapter XII. "The Nature of Chemistry".
Omit section 14, Valency.

Chapter XV. "The Relation of Chemical Processes to Everyday Life".
Omit from the beginning of section 3, Speed of Chemical Reaction, page 343, to the end of the Chapter, page 361.

Chapter XVI. "Earth Products in Industry".
Omit beginning Experiment 207, page 367, to the beginning of section 3, Building Material, page 379.

Chapter XVIII. "The Origin and Transmission of Sound".
Teach the whole Chapter.

Chapter XXI. "Light and Colour".
Omit from the beginning of section 4, Fatigue of the Eye, page 471, to the end of the Chapter, page 478.

Chapter XXIII. "Illumination and Its Measurement".
Teach the whole Chapter.

Chapter XXV. "The Electric Current".
Teach the following sections only:
Section 2. Magnetism Is Produced by Electricity, page 517.
Section 7. Theory of a Voltaic Cell, page 527.
Section 8. Polarization, page 529.
Section 9. Varieties of Voltaic Cells, page 529.
Section 15. Application of the Heating Effect of Electricity, page 540.
Section 16. Electric Lighting, page 541.

Chapter XXVII. "Electricity and Its Relation to Magnetism".
Omit the following sections:
Section 8. Dynamos.
Section 9. Electric Motors.
Section 10. Transformers.

PHYSICAL GEOLOGY

INTRODUCTION.

"Never before has the average person had so wide an opportunity of coming into contact with the diverse aspects of nature as is afforded him to-day, through the use of the automobile. River valleys, gorges, waterfalls, divides, meandering brooks, cliffs, lake shores, waves, tidal marshes, mountain peaks, and mountain parks; each and every topographic phenomenon has for most people a degree of significance it never had before."—Introduction, *New Physical Geography.*

A study of the geology of Canada is necessary to throw light upon its physical geography. Geologists have been also geographers, for they have been compelled to explore and map a great wilderness, in order to study and record its geology. A gradual evolution has brought our lands to the present extent and form, and an almost equally prolonged development has given the present population of plants and animals, and has set man himself to take advantage of the vast resources of this northern half of the continent.

Teachers must make a common-sense interpretation of this outline and avoid a too intensive treatment of the content. While a body of factual knowledge is desirable, teachers should strive for understanding and appreciation of the forces of nature that surround us, and of the vast changes that have taken place, and are continuing to take place, in our earth.

No text-book to be purchased by the student has been authorized by the Department of Education. Surround the student, if possible, with good reference books and periodicals, such as *The National Geographic Magazine* and *The Canadian Geographic Magazine,* and allow him to receive the joy that comes from discovery; and to partake of the search, organization, and understanding that must accompany research work. Have the students make collections of specimens and pictures for illustrative purposes. Field excursions, properly organized and conducted, should be made frequently.

New Physical Geography, by Tarr and von Engeln (Macmillan Company), was used extensively when the Course was outlined, and should be made available to the students as a reference work. *The Ontario High School Physical Geography,* by Gilbert and Brigham (Macmillan Company, 1921), once used in Alberta as a text-book, contains much useful information, in that the background is Canada. The Chapter on The Geological History of Canada is very helpful.

The following statement, by Orvil C. Pratt, President of the N.E.A., is worth quoting: "Teaching should centre on reality,

using a text-book (or outline) merely as a guide-book is used in travel. What is wanted as the product of teaching is functional knowledge; not knowledge measured by mass."

The purpose of this Course is not to make geologists of the students, but to develop powers to observe those things that lie at their very feet, and to help them to interpret those things, as signs of one of the newest parts of the earth, against the geological history of the earth.

A selection from the following reports, pamphlets, and maps, available through the School-book Branch of the Department of Education, should be in every school where this course is taught:

New Geological Map of the Province of Alberta, by John A. Allan, 1937.

Mineral Resources of Alberta, First and Second Annual Reports, by John A. Allan, 1920.

Geology of Central Alberta, by John A. Allan and Ralph L. Rutherford, 1934.

Geology and Water Resources in Parts of the Peace River and Grande Prairie Districts, Alberta, by Ralph L. Rutherford, 1930.

Geology Along the Bow River Between Cochrane and Kananaskis, Alberta, by Ralph L. Rutherford, 1927.

Geology of the Area Between North Saskatchewan and McLeod Rivers, Alberta, by Ralph L. Rutherford, 1928.

Geology of the Area Between Athabaska and Embarras Rivers, Alberta, by Ralph L. Rutherford, 1928.

Geology of the Foothills Belt Between McLeod and Athabaska Rivers, Alberta, by Ralph L. Rutherford, 1925.

Sixteenth Annual Report of the Research Council of Alberta, 1935. (The other fifteen Annual Reports are also available.)

The Southern Plains of Alberta, by D. B. Dowling, Department of Mines, Ottawa, 1917.

REFERENCE BOOKS.

Tarr and von Engeln: *New Physical Geography* (1936), (The Macmillan Company).

Cornish and Whyte: *Ontario High School Physical Geography* (1923), (The Ryerson Press).

Allen and Ferguson: *Elementary Science* (1931), (The Ryerson Press.

Chapters III, V, VI, IX, X, XVI, XXIII.

Any other available books on Geology or Physical Geography.

N.B.—This outline is purely tentative, and is subject to revision. Teachers may select from it as much material as their classes can cover in a year's work. Emphasis should be placed on the geology of Alberta.

I.—GENERAL FEATURES OF THE EARTH.

The earth's present surface is the result of two opposing forces: (1) those tending to build it up; and (2) those tending to wear it down. Earthquakes, volcanoes, and crustal movements tend to build the earth's surface up above the sea level. Rain, rivers, frost, waves, and winds tend, in general, to wear down the surface. In the following outline the teacher is asked to lay particular stress on the way in which each factor listed has a definite place in the operation of these physical forces.

A.—The Gaseous Envelope, or Atmosphere.

Very briefly review the following:

1. Composition and function of air.
2. Weight and height of the atmosphere.
3. Humidity of the air.
4. Rain and snow—
   - (a) Measuring rainfall.
   - (b) Ratio between rainfall and evaporation.
5. Temperature of the atmosphere—
   - (a) Sources of heat in the atmosphere.
   - (b) Modes of warming and cooling—
     - (1) Radiant energy: (a) passage of radiant energy; transparent and diathermanous substances; (b) radiation from the earth; compare soil, water, and rock as radiators; (c) reflection and absorption of heat.
     - (2) Conduction: (a) compare water, air, ground, and iron as conductors of heat; (b) warming of soil and bodies of water.
     - (3) Convection: (a) nature of convection currents in (i) air; (ii) water; (b) chief originating cause of winds; heat from the sun; (c) insulation; dead-air spaces.
   - (c) Causes for differences in temperatures of the earth—
     - (1) Position of the sun in the heavens: (a) from morning to night; (b) from season to season; (c) from place to place.
     - (2) Altitude.
     - (3) Nature of the soil; warm and cold soils.
     - (4) Exposure; north slopes, and sunny south slopes; hilltops and valleys.
     - (5) Influence of bodies of water.
     - (6) Nature and direction of the wind.
   - (d) The mapping of temperature; isotherms.

B.—The Liquid Ocean, or Hydrosphere.

1. Importance of the ocean to mankind.
2. Oceanography—
   (a) Instruments used in exploring the oceans—
      (1) Hayes sonic apparatus, for depth.
      (2) Deep-sea dredge, or trawl, for obtaining sea-life.
      (3) Water bottle, and thermometer.
3. Ocean basins; the sea-floor—
   (a) Nature of the sea-floor.
   (b) Deposits on the ocean bottom—
      (1) Rock fragments.
      (2) Ocean-bottom oozes; globigerina ooze; diatom ooze; radiolaria; pteropod ooze.
      (3) Red clay:—composition; decomposed volcanic dust and shell remnants.
   (c) Continental shelf, and continental slope.
   (d) The ocean water—
      (1) Composition of sea water.
      (2) Density and pressure of sea water.
      (3) Temperature of the ocean.
   (e) Movements of the ocean waters—
      (1) Wind waves: (a) nature of wind waves; energy and form move forward; (b) rollers, or ground swell; (c) surf, or breakers; (d) undertow.
      (2) Other waves:—earthquake waves; iceberg waves; hurricane waves.
      (3) Tides: (a) cause of tides; (b) high tide, and low tide; spring tides, and neap tides; (c) tide-tables; (d) tidal wave, or "bore"; (e) tidal currents—(i) drift sediment about, helping to form sedimentary strata; (ii) produce a circulation in harbours, helping to remove sewage, filth, etc.; (iii) aid or impede navigation.
      (4) Ocean currents: (a) causes of surface currents—(i) difference in temperature of ocean water ;(ii) wind-drift current; (b) principal ocean currents:—Equatorial Drift; Sargasso Sea; Gulf Stream; North Atlantic Eddy; West Wind Drift; Pacific Eddies; Japan Current; Labrador Current.
      (5) Effects of ocean currents: (a) on climate; (b) aid or retard vessels; (c) cause fogs; (d) drifting sea ice, and icebergs; (e) bring oxygen and food for many sea animals.
      (6) Ice in the ocean: (a) Arctic sea icebergs and floes drift southward in the Labrador Current; (b) icebergs from the Greenland Ice Sheet drift into the Arctic, and from the Great Ice Barrier into the Antarctic.
   (f) Coral reefs:—fringing reefs; barrier reefs; atolls.

C.—**The Solid Rock Crust, or Lithosphere.**

1. Man has learned many facts about the lithosphere from mountains, rivers, valleys, tunnels, quarries, mines, and well borings.
2. Nature of the lithosphere—
   (a) Mantle rock (soil mantle), and bed rock.
   (b) Rocks of the crust—
      (1) Sedimentary rocks: (a) assorting action of waves and currents; (b) binding by mineral cements, and by pressure; (c) examples to be studied:—sandstones; shales; limestones; conglomerate; chemically formed rocks, as salt, gypsum, stalactite; organic rocks, as most limestones, coal (bituminous, lignite, peat).
      (2) Igneous rocks: (a) origin of such rocks: (i) igneous rocks of the surface; (ii) intruded igneous rock—dike, sheet or sill, bosses, batholiths; (b) examples to be studied:—granite, diabase, and basalt.
      (3) Metamorphic rocks: (a) origin of such rocks:—(i) quartzite—altered sandstones; (ii) slate—altered clay rock; (iii) marble—altered limestone; (iv) anthracite—altered coal; (v) schist—altered from various rocks; (vi) gneiss—altered from various rocks; (b) study samples of the above rocks.
   (c) Resistance of rocks—
      (1) Durable rocks; hills, ridges, peaks,—mainly sandstone, quartzite, and granite.
      (2) Weak rocks; valleys formed,—limestone, marble.
      (3) Agents of weathering:—percolating water, air, and the action of animals and plants.
      (4) Rate of weathering; varies with the rock, climate, exposure, and steepness of slope.
      (5) Results of weathering; residual soil; transported soil; dissolved mineral substances; talus; landslides; soil creep; formation of sedimentary strata; valley broadening; rock sculpturing.
      (6) Agents of erosion:—wind; rivers; oceans; lakes; glaciers.
      (7) Denudation; tends to lower the land, opposed to frequent uplifts.
      (8) Illustrate by such studies as the Cypress Hills formation; the Selkirk Range, in British Columbia.

II.—RIVERS, VALLEYS, LAKES, AND SWAMPS.

A.—Supply of Water:—underground supply; run-off; variation in run-off; perennial flow; regulation of river volume; floods.

B.—Meaning of the following terms:—gorge; ravine; gully; canyon; gulch; glen; dale; dell.

C.—Divides and Valleys—

1. Divides separating river systems.
2. Subordinate divides between different branches of the same system.
3. Meaning of term "watershed".
4. "Streams carve the depressions along which they flow". Rain sculpture; the bad lands.
5. Erosive action of rivers—
   (a) Degrading and aggrading of valleys.
   (b) Potholes; swift-flowing streams.
6. Waterfalls and rapids.
   (a) A degrading stream flows from strong to weak rocks; Niagara.
   (b) Rapids; formed over dipping surface of durable rock.
   (c) Joint-plane falls.
7. Young, mature, and old valleys.
8. River flood plains.
9. River terraces.
10. Deltas.
11. Alluvial fans.
12. Imperfect development of drainage—
   (a) Lake basins formed by some interference with drainage; glacial invasion, volcanic craters, ox-bow lakes, alluvial cones, landslides, lava floods.
   (b) Most lakes are long because they occupy parts of river valleys.
   (c) Deltas tend to make lakes irregular; waves tend to straighten the shores.
   (d) Salt lakes:—Caspian Sea, Dead Sea, Great Salt Lake. Cause:—source of salt, failure to overflow, increasing saltiness.
   (e) Life history of lakes:—swamps caused during filling of lakes; peat bogs, lake swamps, lake shore swamps, tundra swamps, river swamps, arid land swamps.

III.—PLAINS, PLATEAUS, AND DESERTS.

1. Marine and coastal plains.
2. Lake plains: (1) the Red River Valley plains; (2) the Great Lake plains.
3. River plains.
4. Prairie plains; the three prairie levels.
5. Origin and nature of a plateau.
6. Life history of a plateau; gorges, canyons, mesas, and buttes.
7. Nature of deserts.
8. Wind action on deserts; sand dunes, sand storms.

IV.—MOUNTAINS.

1. Names applied to units of mountain form:—range, system, cordillera, ridge, peak, interior basin, park, water gap, wind gap, pass.
2. Cause of mountains.
3. Life history of mountains:—young, mature, and old mountains.
4. Brief study of the structure of the Rocky Mountains—
   (a) Deposition period:—great depth of sediment, approximately 50,000 feet.
   (b) Uplift period:—beginning of Tertiary.
   (c) Erosion period:—includes glaciation.
5. Mineral products of mountain regions.

V.—VOLCANOES, EARTHQUAKES, AND HOT SPRINGS.

1. Life History of a volcano.
2. Earthquakes—
   (a) Cause; characteristics; effects.
   (b) Recording and locating earthquakes.
3. Hot springs; Banff springs; mineral deposits at surface.

VI.—GLACIERS AND THE GLACIAL PERIOD.

1. Mountain valley glaciers:—formation; movement; glacial erosion; moraines—lateral, medial, and terminal; outwash deposit; source of water, of sediment; rock flour; nature of deposit.
2. Continental glacier, or ice sheet (the Greeland Ice Sheet):—extent; movement; ice-cap; rock material—on the surface, at the base; deposits at the margin; icebergs—causes, effects.
3. Surface forms due to glaciers:—kames; eskers; drumlins; rounded and fluted hills; U-troughs; giant kettles; lake basins.
4. The glacial period—
   (a) Evidence of a glacial period in Canada, and in Alberta in particular.
   (b) Effects of this ice sheet: (1) on the land surface; (2) on soil; (3) on streams; (4) on lakes.
   (c) Meaning of the following terms:—drift; till, or boulder clay; glacial scratches.

VII.—CLIMATE.

1. Difference between weather and climate.
2. Climate—
   (a) Five climatic zones.
   (b) Influence of altitude, water, winds, ocean currents, topography on climate.
   (c) Climate of Canada, and of Alberta in particular.

Note.—It is more important that the student should grasp the principles which control climate, than that he should study a systematic account of climates.

GEOLOGICAL TABLE FOR ALBERTA.

Era.	System.	Group.	Formation.	Life Conditions.
CENOZOIC	Quaternary.	Recent.		Man assumes importance.
		Pleistocene.		Periodic glaciation. Great mammals, such as the mastodon, become extinct.
	Tertiary.	Pliocene.		Apthropoid apes appear.
		Miocene.	Hand Hills conglomerate.	Period of greatest mammals.
		Oligocene.		Modern mammals and birds develop.
		Eocene.	Paskapoo.	Ancient mammal types fade, and new ones come in.
MESOZOIC	Upper Cretaceous.	Montana.	Edmonton. Bearpaw. Belly River. Pierre.	Reptiles of great size and great variety. Plant material approximating tropical flora of to-day found as petrified wood (cinnamon).
		Colorado.	Benton.	
		Dakota.	Dakto (Blairmore).	
	Lower Cretaceous.	Kootenay.	Kootenay Coal Measures.	Flowering plants appear; ferns, cycads.
	Jurassic.		Fernie shale.	Time of toothed birds and flying reptiles.
	Triassic.		Shales.	Time of dinosaurs.
PALEOZOIC	Permian.		Upper Banff shale.	Time of amphibians.
	Carboniferous.	Mississippian.	Rocky Mountain quartzite. Upper Banff limestone.	Period of ancient sharks and crinoids.
		Pennsylvanian.	Lower Banff shale.	Rise of primitive reptiles and amphibians. Ancient coal-swamp floras.
	Devonian.		Limestones:— Lower Banff. Intermediate. Sawback.	Dominance of fishes, corals, and shelled animals.
	Silurian.		Halysites beds.	Rise of lung fishes and scorpions.
	Ordovician.		Graptolite shales. Goodsir shales.	Rise of shelled animals.
	Cambrian.	Upper Cambrian.	Ottertail limestone. Chancellor shales. Sherbrooke limestones. Paget limestones. Bosworth shales and limestone.	Dominance of trilobites.
		Middle Cambrian.	Eldon limestone. Stephen shale. Cathedral limestone.	
		Lower Cambrian.	Great White shale and limestone. St. Piran quartzite. Lake Louise shale. Fairview sandstone and conglomerate.	
PROTEROZOIC	Pre-Cambrian.		Hector shale. Corral Creek standstone.	Time of first invertebrates. (Note.—Conditions were such that evidence of organic life: (1) larval life, (2) dawn of unicellular life, before the Proterozoic Era has been obliterated.)

IX.—ECONOMIC GEOLOGY OF ALBERTA.

Alberta produces at present over 90 per cent. of the total petroleum production of Canada. Several large natural gas fields exist in the Province. There are more than 15,000 square miles of bituminous sands. At Fort McMurray there are valuable beds of salt. Other minerals are found, as: gypsum, mica, talc, bentonite, copper, gold, silver, iridium, and iron. 1,500,000 horse-power is available in our water power, while only 72,000 horse-power has been developed. There are over 1,000,000 million tons in coal reserves, with an annual production of over 5,000,000 tons.

A *selection,* to be determined by local conditions and time available, is to be made of the following topics. Other topics may be substituted or included, at the discretion of the teacher.

1. A coal-bearing formation.
2. An oil-bearing formation.
3. Building stone.
4. Gravel beds.
5. Placer gold.
6. Water power in Alberta.
7. Other mineral deposits of Alberta.
8. Cores from wells; diamond drills.

Note.—Field work is so valuable that it should be included in every course in geology. The following are some of the phenomena that are likely to be found within easy reach of a school:

1. Illustrations of weathering:—cliffs, ledges, boulders, old stone or brick buildings.
2. Nature of country rock:—in river valleys, railway cuts, quarries. In such places, stratification, joint planes, folding and faulting, and fossils, may possibly be found.
3. The soil:—characteristics and depth; soil of rock decay, or transported soil; study its origin in some cut.
4. River transportation:—road gutters, ploughed fields, small wet-weather streams, railway cut. Nature of action; load carried; disposition of load; result of removal. Young stream valleys; alluvial fans; deltas; walterfalls. The entire subject of river action and life history of valleys may be built up around a field excursion to a near-by stream.
5. Shore lines:—lake shore, river bank, or shore of a pond. Action of waves; bars; wave-cut cliffs; small-stream deltas; shore swamps.
6. Glacial phenomena:—striae; till banks; scratched stones. Are pebbles or boulders foreign, i.e., unlike the country rock? Is till unstratified? Find cuts of stratified drift—evidence of water action. There may be moraines, kames, eskers, or drumlins.

7. Fossils:—gravel pits, quarries, coal mines, bad lands, railway and road cuts, outcroppings. A study of fossils interprets the condition of the earth that developed a particular type.

Note.—As enrichment material, teachers who have both time and interest, *may* develop a unit on minerals.

Minerals are recognized by their physical and chemical properties; of these the more important are:

1. Composition:—elements present in the mineral.
2. Crystal shape.
3. Hardness:—ability of one mineral to scratch another. Scale: (1) talc (softest); (2) gypsum; (3) calcite; (4) fluorite; (5) apatite; (6) feldspar; (7) quartz; (8) topaz; (9) corundum; (10) diamond (hardest).
4. Streak:—colour of the powdered mineral.
5. Lustre:—metallic or non-metallic.
6. Cleavage.
7. Fusibility:—some minerals melt readily; others are nearly infusible.
8. Taste, smell, feel:—taste (salt); odor (arsenical pyrites); feel (graphite and clay).
9. Mineral deposits and veins:—how mineral deposits are worked.

GENERAL SHOP

INTRODUCTION.

The subject of General Shop in the High School will follow the same general plan as was outlined for the Intermediate School. A wide range of options is provided for the school to offer, according to the requirements of its constituency and the financial ability of the district. The purpose of the course is to give a maximum amount of manipulative experience that may be useful in itself as the background for a tool-using trade, but that may be more valuable in satisfying the natural urge among many students to do things. Under the direction of a competent and wise teacher, there are very great educational possibilities inherent in this subject. By the time the student reaches the High School, cumulative personality and attainment records should indicate his inclinations and aptitudes. He may not be a scholastic type, properly appealed to through books or the class-room method of instruction, but he may show distinct ability in creative handworks. He may be inferior in written examination results, but superior in gradings for work done with his hands. By recognizing this ability and encouraging him, because of his success in making things, the whole tenor of his school life may be changed, and even his class work made much more satisfactory. By applying mathematics, science, history, drafting, to shop experiences, these subjects become more vital. In short, because of the interests developed within the student, he becomes more educable.

This course makes provision for varying abilities and experiences on the part of the student. One who has not had any previous experience may elect this option, in which case he will have to begin with the simpler projects, until it is clear he can profit from the more difficult. This must be left to the judgment of the instructor. For one who may have followed shop courses previously, the more difficult assignments or choices may be made.

There are no minimum requirements set out in this programme. The weaker student will be expected to work to his capacity. The more capable student will, in the same way, be required to work to his capacity. He will be expected to do more projects or more difficult projects.

The essence of the General Shop idea is individuality. Few subjects are more adaptable in catering to individual differences among students. Ideally, if an instructor could be secured, who was versatile enough, each student at the same time might work at a different project, using a different medium. Practically, the projects should be related closely to the student's personal interests, which should be the dominating influence in the choices made, subject to the ability of the student and the limitations of the shop, and always subject to the judgment of the instructor.

A daily log of the work done by each student should be kept. The taking of elaborate notes is discouraged, although there is a place for notes as a record of achievement and a concise statement of the thought processes involved. No project should be attempted without a shop dimensioned sketch having been first prepared. These sketches should be carefully preserved, and with the notebook, made available for inspection. Great care should be taken by the instructor in having each student's plan for his project carefully scrutinized before he begins work. If this is not done, and projects are made which violate principle of good design, the shop is liable to fall into disrepute. The finished project will fail to please, no matter how careful the workmanship may be, unless the design of the project is good. This is fundamentally important. A finished model, to give the greatest satisfaction, must not only show good craftsmanship, but must be functionally fit, structurally sound, and artistically pleasing.

WOODWORK.

There may be students, desiring to elect this option, who have had no previous training in the use of woodworking materials. This may be allowed, but, of course, such would necessarily have to be assigned projects of a more or less elementary nature. In a smaller school they might take projects outlined for a junior division with which probably they will be working. If they show ability, it might be wise to permit them to proceed with the work of this grade. If they do not show aptitude, weak or backward students should not be encouraged to seek credit in this grade.

The projects in this grade should be of a more advanced type, and might well involve the use of woodworking machinery. Hardwoods might be used for the cabinet work experience, and special attention might well be given to finishes. A boy who has had three years in woodworking might well be given work in building construction, that would make him intelligent in the building of a summer cabin, a garage, or an outhouse. He should know the principles of good construction; how to make window frames, and insert the windows properly; how to make a good door, and hang it properly. **Students may select two phases of the three outlined, which will constitute a full year's work.**

Lumber.—Standard dimensions of common types, uses; grades of lumber, their uses; hardwoods available for furniture construction, costs, and economical use; estimates of costs of finished products in furniture, or in building construction. The use of the steel square.

Working drawings or plans will be necessary for all shop projects.

(a) Cabinet Work.

In cabinet work, fairly elaborate projects should be undertaken, subject to the approval of the instructor. The use of woodworking machines is encouraged. Design, finish, and decoration of the project are important, e.g., polishing, inlay, carving.

Suggested projects: chesterfield or other table, gate-leg, end table, library table, radio case; piano bench; china cupboard; writing desk; hall stand.

(b) Wood-turning.

Simple spindle-turning and face-plate turning. At least **one** finished piece of work involving a major turning job should be turned out. Much practice work will precede the piece actually carried out.

Suggested models: floor lamp, table lamp, fruit bowls (decorated), table legs.

(c) Building Construction.

Group work in the building of a small building, e.g., dog kennel, child's play house, garage. Special attention will be given to roof construction, window framing, door construction, and stair building; the use of the steel square.

METAL.

A student may take any **one** phase of this work, or a combination.

(a) Machine Shop.

The metal working experience in this phase will involve hand working, and machine tools. A screw cutting lathe, a grinder, and a drill press should be available for machine operations. A set of taps and dies is also essential in the interpretation of the course.

The following processes should be carried out: cutting, sawing, filing, drilling, countersinking, turning, squaring, parting, threading, and polishing.

Suggested projects: tool or drill gauge, clothes hanger, dovetail, screw clamp, tapered pein hammer, punch, machine bolt and nut, knife from an old file, set of spanners.

(b) Sheet Metal.

The development of surface; laying the pattern out on the metal itself.

Processes should involve cutting, folding and forming, rolling, burring and edging, fitting, mitre cutting, soldering.

Suggested projects: pint tin cup with handle, circular or semi-circular scoop, lampstand, urn, bowl.

Ornamental sheet metal, involving brass, aluminum, copper, hammering, fluting, polishing, raising, modelling, saw piercing, etching.

Suggested projects: ash trays, plates, plaques, medallions, trophy shields, ornaments.

(c) Forging.

The work of this unit will be a continuation of that of the previous grades. The student should proceed to more advanced problems, using the knowledge and skill acquired.

Suggested projects: a cold chisel, a rock drill, a camp cooking outfit, ornamental grill, hearth fenders, lamp bracket, business sign, umbrella stand, golf bag support, ornamental metal footstool.

ELECTRICITY.

The purpose of this phase of General Shop is to provide manipulative experiences involving the use of the electric current with the minimum amount of theory. In the previous grades, a wide range of opportunity has been opened, which should give a basis for more advanced projects.

Suggested projects: the electric system in a motor car; dismantle and assemble on a suitable frame, to make clear all the parts, and their arrangement; storage battery; dismantle and reconstruct, securing the necessary plates; construct and operate a telegraph system, learning the Morse and Continental codes; set up, connect a telephone system; build a wind electric generating system, using an automobile generator, and making the propeller; rewind a burned-out armature coil; construct a radio set, making the cabinet.

AUTOMOTIVES.

The dismantling, reconditioning, and assembling of a motor car and a tractor.

This option should not be chosen unless there are facilities for properly housing such projects. The instructor must have experience with such work before it may be undertaken on the part of the students for credit purposes. Trestles may be built, and chain blocks, jacks, and tools, may be borrowed from the community. The projects may be similarly secured. Cylinder blocks may have to be sent out for reconditioning, and certain other specialized repairs made outside the school, but much of the work can be done in a satisfactory manner by boys of this grade.

The making of a trailer from a discarded motor car makes an excellent shop project.

FARM MECHANICS.

At least two phases of this outline must be followed if credit is to be granted.

Woodwork (outdoor conveniences).

Study of plans or bulletins for the farmer, supplied from the Department of Agriculture, or elsewhere.

Suggested projects: chicken coop, chicken house, hog house, granary, garage, machine shed. Most of these buildings could be

built on skids, and delivered, as finished. Local persons might supply lumber and use the finished product. Stock loaders, hand cultivators, and row makers for the garden make good projects.

Woodwork (indoor conveniences).

Step ladders, built-in cupboards, wardrobes, ironing cabinets, kitchen stools, flower stands.

Blacksmithing.

Make hooks, chains, clevises, gate hinges. Sharpen plough shares, cold chisels, drills.

Concrete.

Build more complicated wooden forms; re-inforce concrete with wire and rod; strengthen forms by wires and cleats; build watering troughs, well casings, gullies for stable, barn, or toilet. Smooth and decorate concrete surfaces.

Painting and Decorating.

The durability, resistance to weather and wear, sanitation, appropriateness, and economy of various finishes. The money-saving value of outdoor painting. Preparation for various finishes.

Application of paint, stain, varnish, calcimine. Patterns for sponge calcimining. Calcimine the school walls, surface and varnish desks, paint the school building or parts, or an adjoining home. Decorate the building, with approval of the School Board.

Working with Fabrics.

Make cushions, pillows, quilts, stockings, mitts, caps, shawls. Simple methods of upholstering footstools, chairs.

Harness Repairs.

Sew and rivet harness parts. Make bridles; splice leather lines, saddle straps, mattresses.

Upkeep of Farm Machinery.

Small repairs on binder, separator, plough, seeder, harrow. Study of the construction of farm machinery, by chart. How to secure best draft for a team of horses; gasoline engines—stationary, automobile, tractor.

Wickerwork.

Cure native willow for wickerwork; bark, grass, cleat, weaving, rustic work. Apply woven work to wooden frames, chairs, small tables, flower stands, verandah and garden furniture.

HOME ECONOMICS

INTRODUCTION.

This programme in Home Economics is planned for those who will have had previous experience with this subject in the Intermediate School. It is quite anticipated, however, that there will be cases where students will desire to select this option without having had this previous training. This should be possible, in as much as the individual student has been kept uppermost in mind in the drafting of this programme; and a student without a previous course may be given essential experiences, where necessary, to enable her, without too serious loss of time, or other handicap, to take her place in the regular class.

The girl in the home is the central idea about which the details of the course are gathered. This should be kept in mind at all times, and the actual conditions of lives among girls in their homes should be always uppermost. The school is necessarily an artificial environment, and, unless the instruction can be made to carry over into practical situations, it will be of little value. While its main value may be utilitarian, still it has cultural and disciplinarian values. Because of its inclusion on a programme of studies, many girls may be made more teachable in academic subjects. School is a more interesting place, and much of the subject matter of the class-room may be made more applicable to actual life situations. The subject has high correlating possibilities.

It will be noted that no minimum requirements are specified. This omission implies a responsibility upon the instructor to see that an adequate quantity of work is done during the year by each individual, that will justify the awarding of a credit. While this judgment will necessarily be made by the instructor, it is still subject to the checking of the inspector. To facilitate this checking process, each student will keep a note-book in which will be recorded a dated account of each day's achievement. Projects need not necessarily be retained if their retention interferes with the maintenance of interest and effort; but, where practical, projects should be available for inspection. A detailed record of the work of each student will be reported on the proper forms for credit purposes at the end of the year.

The following analysis will indicate the approximate time that should be allotted to each phase of the subject:

Unit 1.—Foods ..... 14 weeks.
Unit 2.—Clothing ..... 14 weeks.
Unit 3.—Home Management ..... 4 weeks.
Unit 4.—Budgeting ..... 2 weeks.
Unit 5.—Personal Responsibility ..... 2 weeks.

These units may be taken in any order, according to the discretion of the instructor. For Units 4 and 5, the work and discussions will be better handled by extending them over the year.

UNIT 1.—FOODS.

Objectives:

To teach selection, cost, marketing, and preparation of foods on the meal basis, from the standpoint of health, economics, and art.

To develop an understanding of the scientific and economic principles underlying cooking and nutrition.

To develop an appreciation for proper organization and planning of housework, to save time and energy.

To develop a true spirit of hospitality.

Subject Matter:

Review simple dinners. Plan, prepare, and serve more formal dinners, to include: appetizers (fruit juices, fruit cups, canapes); soups; meats, fowl, fish, carving; salads; bread, biscuits, cheese straws; vegetables, less commonly used types, and variety in cooking common types; desserts—pastry, frozen, gelatin, steamed; deep fat frying.

Nutrition; digestion.

Cookery for children, aged persons, invalids, and convalescents.

UNIT 2.—CLOTHING.

Appreciation of the value of careful grooming.

Understanding of the principles of good design as applied to clothing.

Ability to plan a suitable wardrobe.

Ability to make simple clothing.

Ability to choose suitable ready-to-wear clothing.

Discussions and Demonstrations:

Clothing survey; clothing budget—relate to family income; care of clothing—daily care, storing, cleaning, and pressing; principles of design and colour combinations.

Projects:

Select at least **one** from Group I, and at least **one** from Group II.

Group I.—Silk undergarment; nightgown; kimono; lounging robe; tailored pyjamas; shorts and blouse; slacks and blouse.

Group II.—Wool skirt and silk blouse; silk afternoon dress; evening dress.

Problems involved:—selection of patterns, styles, and materials; design; color, quality, and amount of material; some study of textile chosen for garment; trimming.

Construction:—seams, stitches, plackets, finishes, etc., as necessary.

Cost:—compare with ready-to-wear.

Accessories.

UNIT 3.—HOUSEHOLD MANAGEMENT.

Problem:

Some girls have their own bedrooms, and others share their rooms. What special care do bedrooms require?

Objectives:

To give a clearer understanding of the girl's obligation as a member of the family; to share in the work of the home.

To develop appreciation of the comfort and pleasure to be derived from a clean, orderly house.

Topics for Discussion:

Purpose of personal room:—bedroom, study; advantages in having own room privacy; responsibility in sharing room; furnishings for bedroom, and their selection; arrangement of bedroom furniniture; qualities and kinds of bedding; use of colour in bedroom; possibilities of improving furnishings; care of bedroom and clothes closet—daily, weekly, occasional.

Project:

Plan a girl's room, simple in design, inexpensive in outlay. Work from pieces of furniture already on hand. Introduce one or more of the following improvements:—curtains, bedspread, rug, dressing table from boxes, wall book-shelf, painting or refinishing old furniture, a study unit.

UNIT 4.—BUDGETING OF MONEY AND TIME.

Problem:

How to get more satisfaction from money spent, and how to ensure an efficient and satisfactory day.

Objectives:

To get the most for one's money; the most for one's time; and the most for one's strength. To help the girl gain, by means of the clothing budget, a better understanding of the advantages of definite planning.

Discussions and Activities:

List activities which use time, money, or strength. Discuss relative importance to health, progress, improvement, etc. Recall previous experience, observation, or reading, in relation to budgets. List items commonly included in family expenditures. Estimate individual share of the family budget. Make inventory of clothes on hand. Avocational expenditures.

Projects:

Keep personal accounts for year. Make a time budget for a high school girl.

UNIT 5.—PERSONAL RESPONSIBILITY.

Problem:

How can high school girls help to make their homes happier, and contribute to the betterment of society?

Objectives:

Appreciation of individual responsibility to the home, and to the community.

Topics for Discussion:

The 100 per cent. girl.—Personal characteristics that help in life work; that help make happiness; that help make a happy home. Ways that these characteristics are developed and strengthened.

TEXT-BOOK.

Jensen, Jensen & Ziller: *Fundamentals of Home Economics* (Macmillan).

REFERENCE BOOKS.

Jensen, Jensen & Ziller: *Fundamentals of Home Economics* (Macmillan).

Lannan, McKay & Zuill: *The Family's Food* (Lippincott).

Bailey: *Foods—Preparation and Serving* (Webb Publishing Company).

Trilling, Williams & Reeves: *A Girl's Problems in Home Economics* (Lippincott).

Bailey: *Meal Planning* (Manual Arts Press).

Chambers: *Breakfasts, Luncheons, Dinners* (Boston Cooking School Magazine Company).

Hunter: *The Girl To-day—The Woman To-morrow* (Allyn & Bacon).

Graves & Ott: *Your Home and Family* (Little, Brown and Co.).

Jordan, Zeller & Brown: *Home and Family* (Macmillan).

Justin and Rust: *Home Living* (Lippincott).

Shultz: *Making Homes* (Appleton).

Trilling and Nicholas: *The Girl and Her Home* (Houghton-Mifflin).

Starrett: *The Charm of Fine Manners* (Lippincott).

Kaufman: *Teaching Problems in Home Economics* (Lippincott).

Van Gelder: *From Thimble to Gown* (Allyn and Bacon).

Pickens: *The Secrets of Distinctive Dress* (International Educational Publishing Company).

Rathbone & Tarpley: *Fabrics and Dress* (Houghton-Mifflin).

Denny: *Fabrics and How to Know Them* (Lippincott).

Everson: *Practical Sewing* (Ryerson).

Dyer: *Textile Fabrics* (Houghton-Mifflin).

Bush and Welbourne: *Design* (Little, Brown and Company).

Gillum: *Color and Design.*

Butterick: *Principles of Clothing Selection* (Macmillan).

Friend: *Earning and Spending the Family Income* (Appleton).

Friend and Shultz: *Junior Home Economics Units* (Appleton).

OUTLINE OF REQUIREMENTS

1937–38

SECOND AND THIRD YEARS—GRADES XI AND XII (OLD COURSE).

N.B.—Details of all Courses except those included in these pages are obtainable in *The Hand-book for Secondary Schools, Alberta.*

GRADE XI

English 3.

LITERATURE:

A.—Prose—

Macaulay: *Clive.*

Drinkwater: *Abraham Lincoln.*

B.—Poetry—

Shakespeare: *Richard II.*

Selections as found in *Tennyson, Browning and Representative Short Poems,* Series I.

*An elementary study of special stanzaic and structural forms of verse.

(a) The Spenserian stanza.
Its form and use.

(b) The Sonnet.
(i) Shakespearean.
(ii) Miltonic.

Their forms and thought.

*Material for this study will be found on pages 7 to 11 of *Tennyson, Browning and Representative Short Poems.*

Form Memorization—

King Richard II.

Act I, Scene 1.
Lines 176–183—"My dear, dear lord . my life is done."

Act I, Scene 3.
Lines 275–281—"All places . . . . faintly borne."

Act I, Scene 3.
Lines 294–303—"O, who can . but lanceth not the sore."

Act II, Scene 1.
Lines 40–68—"This royal throne . . ensuing death."

Act III, Scene 2.
Lines 144–154—"No matter . and cover to our bones."
Act IV, Scene 1.
Lines 91–100—"That honourable day . fought so long."
Act V, Scene 2.
Lines 23–36—"As in a theatre . . have pitied him."

On His Blindness.
Lines 1–14—"When I consider . . . stand and wait."

Ozymandias of Egypt.
Lines 1–14—"I met a traveller . . . stretch far away."

Ode on the Death of the Duke of Wellington.
Lines 209–217—"Not once or twice . . moon and sun."

Locksley Hall.
Lines 1–16—"Comrades, leave me . . . . would be."
Lines 119–128—"For I dipt . . . . . of the world."

Lancelot and Elaine.
Lines 1085–1091—"Then spake the lily maid . let me pass."
Lines 1374–1379—"Then answered Lancelot . be bound."

Abraham Lincoln.
Pages 2–3—"Once when a peril touched . . and Lincoln was the lord of his event."
Pages 34–35—"Be clear about this issue . . without yourselves being the aggressors."
Page 110—"We have preserved the American Union . . shall not perish from the earth."

SUPPLEMENTARY LITERATURE:

(a) Required—
Dickens: *Oliver Twist.*
Blackmore: *Lorna Doone.*
Longfellow: *Evangeline.*

(b) Recommended, but not obligatory—
Eliot: *The Mill on the Floss.*
Goldsmith: *She Stoops to Conquer.*
Sheridan: *The School for Scandal.*

Composition 3.

(a) COMPOSITION:
For details of Course, see *Hand-book* (1930 Edition).
Text-book:—Gordon: *A New Composition for Secondary Schools,* Part III (The Copp Clark Company).

(b) GRAMMAR:
As in authorized text-book.

Text-book:—Stevenson and Kerfoot: *Ontario High School Grammar* (Canada Publishing Company).

N.B.—The examination paper in Composition 3 will include both Composition and Grammar.

History 3.

Canadian History and Civics, Elementary Economics.

(1) Text-book:—Grant: *A History of Canada* (Revised Edition), (Renouf Publishing Company), omitting Chapters I–X (inclusive), XIV, XV, XXIV, and XXXIV.

N.B.—Students are required to understand clearly the causes leading up to the wars dealt with in Chapters XIV and XXXV, the issues involved, and the extent to which these issues were settled by treaties and understandings; but they will not be required, for examination purposes, to know the events in the campaigns of these wars. In this course, time should be given to the discussion of current events and questions of the present day.

N.B.—*The History of Canada,* by Grant, is now out of print, but copies available can be used in Grade XI. Where the Grant History is unobtainable the Department recommends McArthur: *History of Canada for High Schools.*

(2) Text-book:—Burt: *High School Civics* (School-book Branch). It is recommended that pages 7–20 in the text be read as a source of information for the better understanding of the Canadian constitution. Pages 21–81 only will be required for examination purposes.

(3) Text-book:—McGibbon: *Introduction to Economics* (Revised Edition), (Macmillan Company).

Arithmetic 1.

Text-book:—Stanley and Smith: *A Canadian Arithmetic for High Schools* (Oxford University Press).

N.B.—The following sections of the text-book will not be required: Chapter IV, section (B), and all problems bearing on this; Chapter XVI.

Algebra 2 and **Geometry 2.**

These Courses are now the same as *Algebra 1* and *Geometry 1,* respectively, of the new Grade X Programme. (See page 16.)

Chemistry 1.

Text-book:—Black and Conant: *New Practical Chemistry* (Macmillan Company). Chapter 14 is optional. Chapter 22 is to be omitted.

Teachers' Manual for Practical Chemistry, by the same authors, may be obtained from the Text-book Branch.

Agriculture 2.

For details of Course, see *Hand-book* (1930 Edition).

Text-book:—*Canadian Agriculture for High Schools,* Parts VI to X, inclusive.

In addition to Parts VI and X of the authorized text-book,, the following material is prescribed:

1. The Industry of Agriculture in Canada (see Section VII of outline in *Hand-book*).

2. *Any five* of the projects outlined in the *Hand-book*, omitting project "D". (See Section VIII.)

N.B.—Project "D" is withdrawn because the publications are no longer available.

Household Economics 2.

For details of Course, see *Hand-book* (1930 Edition).

Manual Arts 2.

For details of Course, see *Hand-book* (1930 Edition).

Art 2.

For details of Course, see *Hand-book* (1930 Edition).

The pictures prescribed for study in Section V of the *Hand-book* under the head of "Picture Study" have been changed. The following is the revised list:

1. The Fighting Téméraire (Turner), B.R. No. 44.
2. Midwinter (Jonas Lie), B.R. No. 10.
3. Church at Vernon (Monet), D.M. No. 50.
4. The Pilots (Brangwyn), M.M. No. 218.
5. The Stockade (Cezanne), M.M. No. 177.
6. Ice-bound (Metcalf), M.M. No. 10.
7. Hope (Watts), M.M. No. 115.
8. The Knight of the Holy Grail (Waugh), B.R. No. 37.
9. Portrait of a Lady (Lavery), D.M. No. 55.
10. The Ring (Alexander), M.M. No. 64.

The above pictures in color are obtainable from the School-book Branch, size 3½″×4½″. The five pictures prescribed for study under the head of "Sculpture" remain the same. These are available in black and white only. The price of the complete set of pictures is 35 cents, postage prepaid.

The Department has for distribution a Manual, prepared by R. W. Hedley, M.A., covering the sculpture and picture study of Art 2. This Manual may also be had from the School-book Branch. Price 10 cents.

Geography 1.

Industrial and Commercial Geography.

For details of the Course, see *Hand-book*.

N.B.—No text-book has been authorized. All the necessary information can be found in Hilton's *Manual in Geography* (Revised Edition, 1936), which should be in the hands of every student. It may be purchased from the School-book Branch for 75 cents.

Latin 2.

Text-book:—Grammar: Thompson, Tracy & Dugit: *Essential Latin* (Clarke, Irwin & Company).

*Prose: Baker & Inglis: *Latin Prose Composition,* Part I (Macmillan Company).

Reading: Bonney & Niddrie: *Latin Prose and Poetry* (Ginn & Company).

The following selections are required:

Nepos—Readings 1–11 (inclusive).

Gellius—Readings 1–9 (inclusive).

Cicero—Cicero in Exile Writes to His Wife (page 145).

Vergil—Readings 4, 5, 6, and 8.

Suggestions as to the Use of the Prose Text-book.

*The study of *Essential Latin* should be completed before a beginning is made with the Baker and Inglis *Latin Prose Composition.* It is not intended that the latter text-book should be covered chapter by chapter. A careful selection of sentences should be made from each of the chapters studied. The following major constructions should receive special attention:—

	Chapter
1. Direct and Indirect Questions	VII
2. Accusative and Infinitive (omit Chapter XXVII)	XII
3. Purpose clauses	XV
4. Result clauses	XV
5. Substantive clauses of purpose and result	XVII
6. Gerund, Gerundive, Supine	XXI
7. Passive Periphrastic	XXVI
8. *Cum* Clauses	XXIII
9. Participles and Ablative Absolute	XXV
10. Conditional sentences	Oral Exercises, Chapters VII and VIII, Part II

Important uses of the Dative and Ablative cases will require emphasis. Make a selection of the sentences for this purpose from the following Chapters: III, VI, VIII, IX, XI, XIV, XVI, XVIII and XX.

The methods of handling Expressions of Time, Place, and Space may be illustrated by sentences from Chapters IV, V, and VIII.

French 2.

Text:—Grammar: Fraser & Squair: *New Elementary French Grammar* (Copp Clark Company).

Lessons 23–38 (inclusive).

In Lesson 38, use exercise 42 for application of the past definite instead of the appended exercise.

The following irregular verbs: *aller, envoyer, courir, dormir, mourir, ouvrir, tenir, venir, conduire, connaître, croire, dire, écrire, faire, lire, mettre, prendre, rire, suivre, vendre, vivre, recevoir, devoir, asseoir, falloir, pouvoir, savoir, valoir, voir, vouloir.*

Anecdotes (pages 190–208) may be omitted, or used by the teacher as illustrative material.

Reading:—Ford & Hicks: *A New French Reader* (Dent & Sons).

The following selections are required: Nos. 1, 2, 3, 4, 5, 6, 8 and 9. Easy passages for sight translation.

German 2.

Text:—Fraser & Van der Smissen: *High School German Grammar* (Copp Clark Company).

A review of previous year's work, and Lessons XXIX to the end.

For effective work in easy, continuous prose, it is recommended that the students be required to have a dictionary.

Reading:—Baumbach: *Der Schwiegersohn.*

Easy passages for sight translation.

GRADE XII

English 4.

LITERATURE:

A.—Prose:

Carlyle: *Essay on Scott.*

Ruskin: *Sesame and Lilies.* (Study lecture "Of Kings' Treasuries" only.)

B.—Poetry:

Shakespeare: *King Lear.*

Milton and Representative Short Poems, Series I (Oxford University Press).

*A study of the subject-matter of poetry.

(a) The Epic:—the characteristics of the epic, and its more important forms.

(b) The Lyric:—the characteristics of lyric poetry, and its more important forms.

(c) The Drama:—the characteristics of dramatic poetry, and the more common forms of the drama.

*Materials for this study will be found on pages 7 to 10 of *Milton and Representative Short Poems.*

For Memorization—

King Lear.

Act II, Scene 2.
Lines 132–137—"Sir, I am too old . . . messenger."

Act II, Scene 3.
Lines 1–12—"I heard myself . . . . of the sky."

Act II, Scene 4.
Lines 271–285—"You see me here . . or ere I'll weep."

Act III, Scene 2.
Lines 16–24—"I tax you not . . . . white as this."

Act IV, Scene 2.
Lines 38–49—"Wisdom and goodness . . of the deep."
Act IV, Scene 3.
Lines 18–26—"You have seen . . . so become it."
Act V, Scene 3.
Lines 8–19—"Come, let's away . . . by the moon."

Paradise Lost, Book I.
Lines 1–16—"Of Man's first disobedience . prose or rime."
Lines 22–26—"What in me is dark . . . God to me."
Lines 105–116—"What though the field . This downfall."
Lines 315–330—"Princes, potentates . . for ever fall'n."

A Song for St. Cecilia's Day.
Lines 1–15—"From Harmony . . . . full in Man."

Intimations of Immortality.
Lines 58–66—"Our birth is but a sleep . in our infancy."

Essay on Scott.
Par. 6—"Not what stands . . . . shallow as Time."
Par. 11—"The biographer . . . . . ghost of it."
Par. 18—"A healthy body . . . . . casts it off."

Of King's Treasuries.
Par. 9—"The author has . . . . . That is a book."

C.—SUPPLEMENTARY LITERATURE:

(a) Required—
Shakespeare: *A Midsummer Night's Dream.*
Lytton: *Last of the Barons.*
Stevenson: *An Inland Voyage.*
Gaskell: *Cranford.*

(b) Recommended, but not obligatory—
Thackeray: *Henry Esmond.*
Barrie: *The Little Minister.*
Bronte: *Jane Eyre.*

COMPOSITION:

Text-book:—Rhodes: *Effective Expression* (Gregg Publishing Company).

History of English Literature.

As outlined in *Hand-book* (1930 Edition).

The following should be added after Section 5 (b):

The lives, works, and places in literature of Thomas Huxley, John Ruskin, Matthew Arnold.

The great poets of the Victorian Age: Alfred Tennyson, Robert Browning.

The romancer and essayist of the Victorian Age: Robert Louis Stevenson.

Readings from the prescribed text-book: Wordsworth, "She Was a Phantom of Delight", "Influence of a Mountain Peak", "The World Is Too Much with Us"; Coleridge, "Kubla Khan"; Byron, "Wordsworth" (from English Bards and Scotch Reviewers), "The Bull Fight"; Shelley, "Ode to the West Wind"; Keats, "Ode on a Grecian Urn"; Lamb, "A Dissertation Upon Roast Pig"; De Quincey, "A Meeting with Lamb", "Incident of the Malay"; Scott, "First Meeting of Edgar and Lucy"; Jane Austen, "Elizabeth Has a Distinguished Visitor"; Macaulay, "London Coffee Houses"; Carlyle, "James Boswell"; Dickens, "Mr. Micawber", "Uriah Heep"; Eliot, "Maggie Behaves Worse Than She Expected"; Thackeray, "Mrs. Crawley", "The Colonel and Little Rawdy"; Huxley, "The Method of Scientific Investigation"; Ruskin, "On Some Lines from Lycidas"; Arnold, "A Definition of Culture"; Tennyson, "Passages from In Memoriam", "Home They Brought Her Warrior Dead", "The Revenge"; Browning, "How They Brought the Good News from Ghent to Aix", "Incident of the French Camp", "My Last Duchess"; Stevenson, "El Dorado".

Text-book:—Pace: *English Literature, with Readings* (Revised Edition), (Allyn & Bacon). Text complete.

History 4.

(a) Modern European History.

Text-book:—Robinson: *Mediaeval and Modern Times* (Ginn & Co.), from page 268 to the end, with Chapters XV and XVI omitted.

(b) English Constitutional History.

Text-book:—Marriott: *English Political Institutions* (Oxford University Press), with the following Chapters omitted: V, VI, VIII, IX, XI–XIV (inclusive).

In this course, time should be given to the discussion of current events and questions of the present day.

Algebra 3.

Text-book:—Durrell & Wright: *A New Canadian Algebra* (Clarke Irwin Company), Chapters I–IX (inclusive). Revision exercises are to be used for checking, practice, and review.

Geometry 3.

N.B.—This course is no longer required for credit in Senior Matriculation at the University of Alberta. It is continued for those who wish a third unit in fourth year mathematics. It will give no extra credit at the University, but will be accepted as one of the optional units for the General and Normal Entrance courses. **See pages 6 and 12.**

For details of the Geometry 3 Course, see *Hand-book* (1930 Edition).

Text-book:—McDougall and Sheppard: *Analytical Geometry for High Schools* (Copp Clark Company), with the following sections omitted: 56, 71–81 (inclusive), 111–117 (inclusive), 137–139 (inclusive), 159–164 (inclusive).

Trigonometry 1.

Text-book:—Conant: *Plane Trigonometry* (American Book Company), with Chapters X, XI, and XIV omitted.

Chemistry 2.

Text-books:—

Littler: *Elementary Chemistry,* Book II.

Littler: *Laboratory Manual* to accompany Book II.

This unit should be offered only in those schools where the instructor in Chemistry holds, at least, standing in Chemistry 2, or its equivalent, and where the laboratory equipment is adequate for performing all of the prescribed experiments.

The Introduction, Complex Silicates, pages 97–101, Chapter XII, Chromium, pages 234–236, Chapters XXII, XXIV, XXVI, and the Conclusion of the authorized text-book may be treated as required reading, and need not necessarily be taken up in class.

The following exercises from the Manual comprise the practical work of the year:

(a) To be treated as demonstration experiments only: Exercises 14, 19 (No. 5 only), and 42.

(b) To be treated either as demonstration experiments or to be required of all pupils, as the teacher may determine: Exercises 6, 27, and 39.

(c) To be required of all pupils: Exercises 8, 9, 10, 13, 15, 16, 17, 21, 22, 25, 32 (Experiment 1 only), 33, 34, 35, 36, 37, 38, 40, 41, 43, 46, 50, 51, and 52.

It is felt that the above prescription should require roughly 30 periods in the laboratory, allowing two periods for Exercise 33, and four or five for Exercises 51 and 52. This does not include the time required for demonstrations by the teacher.

Each teacher of Chemistry 2 will be required to certify before June 30th, 1938, that his students have performed the laboratory experiments outlined in the authorized Manual.

In the examination in Chemistry 2, 85 per cent. of the marks will be based on the written examination; the other 15 per cent., on the laboratory work of the student. In submitting their certified statements, teachers will be required to give their estimate of the practical work of each student, by assigning him a mark from the total allotted for this part of the course. This mark will be added to that received by the student in his written examination.

For the purposes of the laboratory work, experiments performed in groups of two will be considered as individual work.

Teachers of Chemistry 2 are requested to note that the laboratory work of candidates should be graded. Only in those cases where all experiments have been performed and recorded with as great perfection as can be expected from a Grade XII student should the maximum be allowed. Candidates will be required to pass on the Laboratory work as well as on the paper on Theory.

Physics 2.

Text-book:—Merchant, Chant and Cline: *Mechanics, an Elementary Text-book* (Copp Clark Company), omitting paragraphs 104, 113, 169, 170, and 218, and Chapters XXIV, XXV, XXVI, and XXVIII.

Biology 1.

The authorized text-book will supersede the outline in the *Hand-book.*

Text-book:—Phillips and Cox: *Elementary Biology* (Clarke, Irwin & Company), omitting Chapters XXVIII and XXIX.

Latin 3.

Grammar:—Bennett: *Latin Grammar* (Allyn & Bacon), (Teachers' reference).

Prose:—Baker and Inglis: *Latin Prose Composition,* Part II (Macmillan Co.), omitting Chapters IX, XVII, and XX.

Reading:—Bonney & Niddrie: *Latin Prose and Poetry* (Ginn & Company).

The following selections are required:

Cicero—Selections 2, 4, 5.
Cicero—Letters 1 to 8.
Livy—Selections 9 to 15.
Vergil—Georgics: all of the selections.
Horace—Odes: all of the selections.
Ovid—Selection 9.

French 3.

Grammar and Composition:—Fraser and Squair: *New Complete Grench Grammar* (Copp Clark Company).

In Part II, the following sections are to be omitted: 169, 171, 182, 183, 187, 196, 205, 207, 216, 217, and 419. Pages 1 to 92 of Part II, which deal with the verb, are required; but pages 92 to 208 are to be used by instructor and students for the purpose of reference only. The instructor should review the sections of Part I relating to the article, the numerals, the noun, pronoun, adjective, and adverb, with such additions from Part II as are obviously necessary for general practice. Special emphasis on continuous prose and free composition.

Teachers' Reference:—Ritchie and Moore: *Elementary French Composition* (Thos. Nelson & Sons).

Reading: Labiche and Martin: *Le Voyage de Monsieur Perrichon* (Edited by Professor Sonet).

A New French Reader (Ford and Hicks): selections 10, 11.

German 3.

Text-books:—

Fraser and Van der Smissen: *High School German Grammar* (Copp Clark Company).

Prose:—Pope: *German Composition* (Holt), to end of Part I (page 55).

Reading:—Sudermann: *Die Heimat* (edited by Fraser and Van der Smissen), (D. C. Heath).